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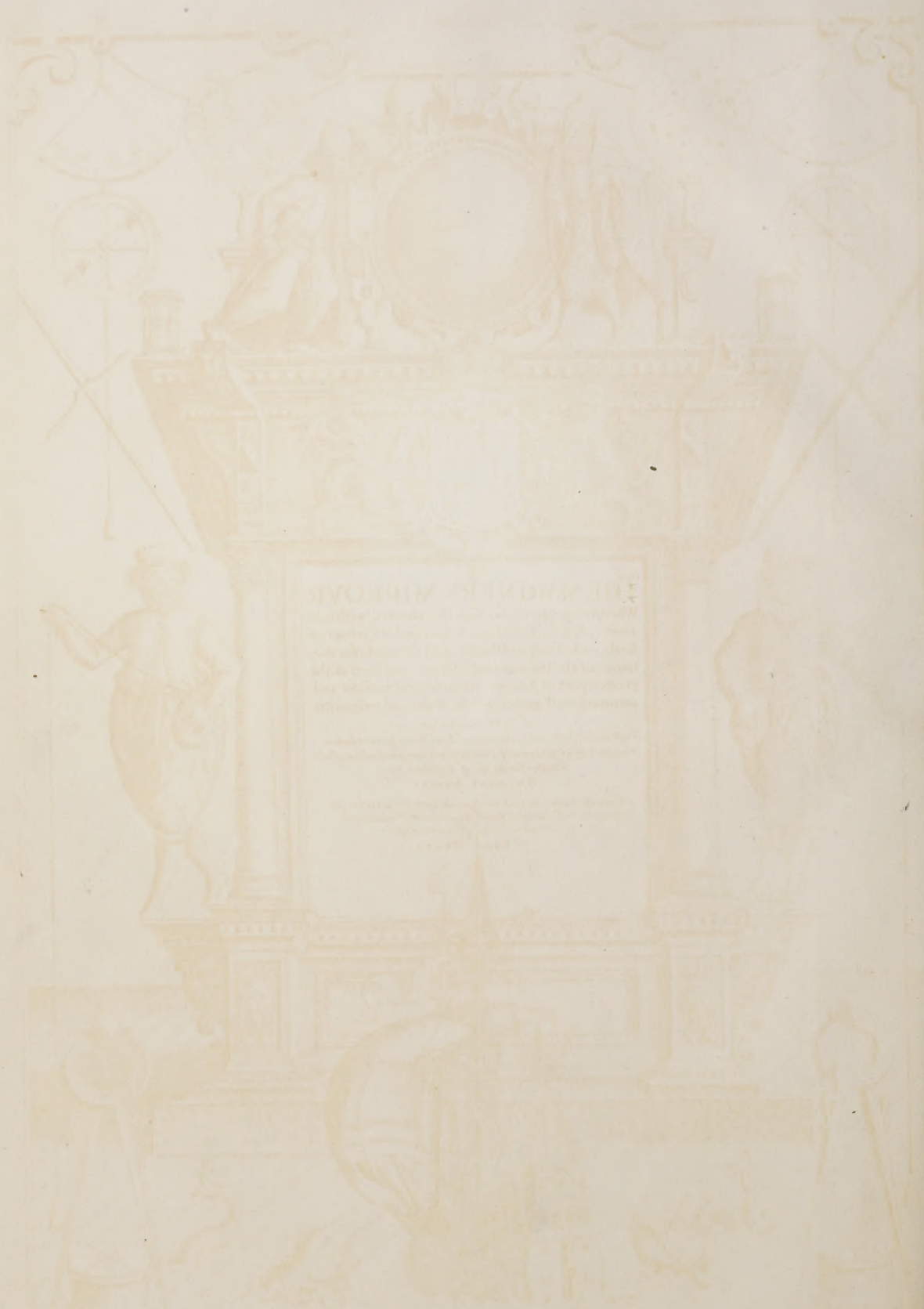


THE MARINERS MIRROVR

Wherin may playnly be seen the courses, heights, distances, depths, soundings, flouds and ebs, risings of lands, rocks, sands and shoalds, with the marks for thentrings of the Harbouroughs, Havens and Ports of the greatest part of Europe: their seueral trafficks and commodities: Together w.th the Rules and instrumets of NAVIGATION.

First made & set fourth in diuers exact Sea Charts, by that famous Nauigator LVKE WAGENAR *of Enchuisen. And now fitted with necessarie additions for the use of Englishmen by*

ANTHONY ASHLEY.

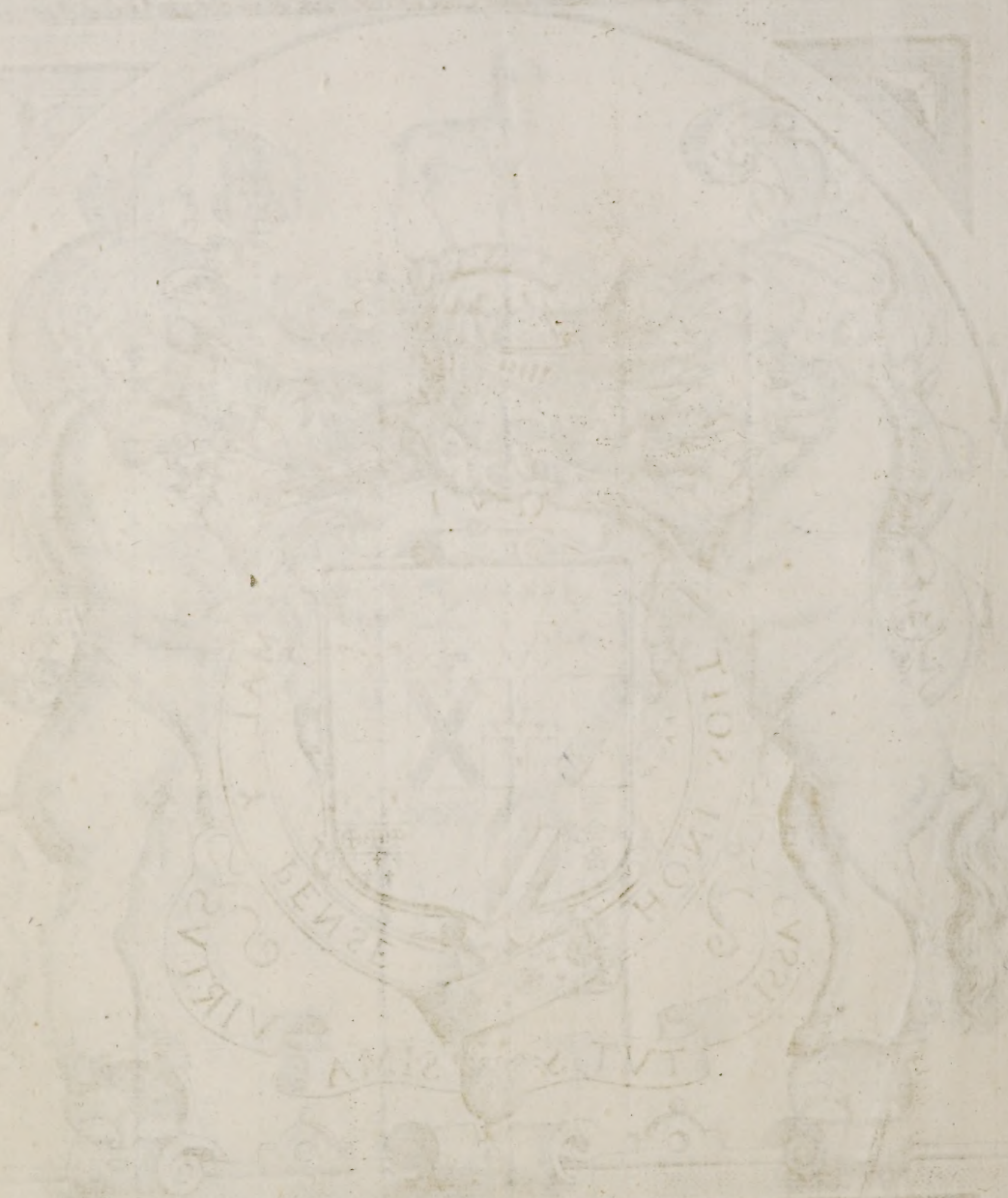
Herin also may be understood the exploits lately atchiued by the right Honorable the L. Admirall of Englād with her Ma.tie Nauie and some former seruices don by that worthy Knight

S.r FRA.s DRAKE.

I. Iacobsz. de hoy fecit.

RPJCB

QVÆ NATVRA POTEST HATTONO CONTVLIT VNI;
ET FORT VNA DEDIT, QVÆDARE, CVNCTA, POTEST;
CERTATIM VIRTVS CVMVLVM SVPERADDIDIT ISTIS;
ANGLICA DIVA TAMEN PLVS TRIBVS VNA DEDIT.
ECQVID HABENT TANTAM SATVRNIA SECVLA DIVAM?
ECQVID HABENT TALEM TEMPORA NOSTRA VIRVM?



RPJCB

TO THE RIGHT HONO-

RABLE SIR CHRISTOPHER

HATTON KNIGHT, LORD CHAVNCELOR OF ENG-

land Knight of the noble order of the Garter, and moſt worthy Chaunceler of the Vniuerſitie of Oxford: my ſinguler good Lord.

RIGHT Honorable, I was longe in a ſtrange debate with my ſelfe, whether it were beſt for me to write ſome thing in excuſe of this ſlacke performance of my promiſe made vnto your Lordſhip now more then a yeare paſt, for the ſpeedie tranſlation of VVageners two bookes of Nauigation; or ſimplie to preſent it vnto your L. leauing all excuſe apart; as that negligent ſeruant of Athens, in Plutarch, who in a cloudie day being ſent home in haſt for his maiſters cloake, went therwith directly to Rome, from whence about a yeare after returning and watching when his maiſter was abroad in a great ſhower, came running as though he had been but then ſent, & caſt the cloake on his maiſters backe, ſaying, Sat citò ſi ſatis oportunè. Though this might ſomwhat fit my purpoſe, & was verie well taken for the time as a ſufficient ſatiſfaction for the offence committed: yet in my conceite, it can not be thought but a very vndutifull and reprouable part. And therefore I chooſe rather (as in duetie it becometh) humblie to beſeech your L. pardon, then to borrow any ſhift or colour to ſhadow my default: with aſſured hope (notwithſtanding) that as I was willyng to commit the errour, in taking vppon me a matter ſo far beyonde my reache: So your L. wilbe pleaſed to giue eare vnto ſuch honeſt reaſons as may make way for mine excuſe in your L. graue iudgement. I muſt then plainly and ſimplie confeſſe that I no ſooner vnder-took this woork then miſtook it, not conſidering what perfect knowledge, proper termes and peculier phraſes are neceſſarilie and inſeperablie incident to the true interpretation of any Mechanicall ſcience, much more to this notable art of Hidrographie or Nauigation: the want whereof did driue me to reade many bookes, and to confer with ſuch as either for their knowledge or experience could any wayes further mine intent. But as it chanceth to buſie Builders deſirous to excell the Modell, not forecaſting ſuch accidents as might interrupt my purpoſe, I was likewiſe much deceaued euen in the eſtimate of my labour, time, and charge of the compaſſyng of my deſſein: For by reaſon of my dayly attendance on your L. and the reſt of my Lordes of her Maieſties moſt Honorable priuie counſell, I was forced to take ſuch time for this worke, as I could, by ſtealth, both for the tranſlation it ſelf, and for the ouer-ſeeyng of the negligent grauers: beſides many other my particuler and priuate lets. Howbeit I may aſſure, that (except ſom errours in the printing) there is herein performed the part of a faithfull interpretour: and (be it ſpoken without preiudice to the Auctour) by the aduiſe of the beſt experienced, haue in many places amended and bettered him: Beſides the fit application of the Tables to the Engliſh ſtile and Calculation, explaned with diuers familier examples. Moreouer in moſt of the Plots, the Sea is purpoſly left in blanc, becauſe the Traueiler, finding perchance ſome poynt of the Compaſſe, riſings of Lands, Depths, Soundings, or ought els miſtaken; or ſome Rock, Sand, or other danger left out, or not rightly expreſſed (for nothing ſo perfect but hath his fault) may as he traueileth ſet downe and correct the ſame with his owne hand, as it ſhall beſt like him ſelfe: which doubtles wilbe no ſmale furtherance and contentment euen to the beſt Doctors in this ſcience. In this tranſlation I haue indeuored by all meanes (which in this and all other arts ought to be vſed) to imitate the plaineſt ſtile and common manner of ſpeeche, as eaſieſt to be vnderſtood of all ſorts of men.

But concerning the goodly ſcience of Hidrographie how worthie of all praiſe it is, both in it ſelf and in reſpect of the fruits thereof, as it hath heretofore appeared by Hiſtories of time and teſtimonies of men: ſo of late hath it ſhined moſt brightlie ſince our moſt famous traueilours (to their endleſſe renowne and honour of their countrie) haue aduentured the diſcouerie of diuers vnknown coaſts: and by the ſinguler aſſiſtance of the Almightie God, haue compaſſed the Globe of the whole earth: wherby (no doubt) many excellent wits haue by their manifold experiences & obſeruations contriued one perfect art: in ſo much as, me thincketh, there is miniſtred very great reaſon to prefer it before all other arts or ſciences whatſoeuer. For to omit thoſe commen commendations wherewith Gorgias and Protagoras weare wont to garniſh all artes, pleaſant for knowledge, profitable for practiſe, neceſſarie for life: this hauing an excellent abundance of all theſe, with many other rare and peculier vertues all redounding by the vſe and

practise thereof, to the publick benefit of the whole body of the common wealth, and eache particuler member in the same, hath been not only, as an Elephat, ten yeres in breeding, but euen as much time as the world hath yet stood to come to perfection. The first inuention whereof, further'ed with the artificial aid of many a hidden, strange and almost supernatural deuise, since added to the same by the most studious trauillour and industrious Mathematician, He that would throughly consider, should find matter rather myraculous to wonder at, then to be thought compassable within the reach of mans Capacitie: yea he may in this as in a mirrour, behold the inestimable bountie and infinite goodnesse of God, who, of his vnspeakable loue towards man kinde, which in his secreat wisedome he had determined for the maintenance and releef of humane societie, hath from aboue powred this excellent skill and knowledge into the mindes of men, onelie thereby to haue his wonderfull workes knowne, his praises published, and his holie name from one nation to another glorified.

But what do I seeme to enter into the perticuler praise of this art, seing things of greatest profit are set forth with least price: where the matter it self carieth credit, the man with his comment gaineth smale commendation. It should be therfore, me thinketh, a greater shew of a pregnant wit then perfect iudgement, with affected eloquence to commend this art, or to expresse how necessarie the perfect knowledge therof were for all nations.

Yet if this peereles misterie be of such excellent desert, and high accompt to al the rest of the world, it must needs be most beneficiall and acceptable vnto this our natiue countrie, not only for that it is an Island, and that, one of the most famous in all the world, liyng, as it weare a Triangle, in the great Ocean, enuironed with most dangerous waues, Races, Sands, Rocks and Shoalds; and haning a people naturally apt and geuen to Seafaring: Besides many other necessarie and politicall reasons: But for that it is the holy Sanctuarie, and (almost) only refuge for the afflicted: & the bleßed seat of her Sacred Maiestie: whose incomparable and diuine vertue, the enemies of God and man do most maliciously enuie: and incessantly seek by all diueliſh deuises & practises whatsoeuer to bereaue vs of, as of a most precious Iuell; which all true Christians esteeme of far greater worth and valew, then all the Indian riches.

Wherefore I cannot but perswade my self, but as their raging mallice doth daylie increase and come to height, so the means of our defence in this skill shall still be multiplied. And albeit your L. commandment and charge geuen me to translate these books, hath manifested your zeale and affection for this common good: yet in mine opinion it hath more highly commended and aduaunced the work it self, in that your Honorable approbation hath credited and authorized it. For if the Geometritians triumph, of that Oracle which Appollo gaue to the inhabitants of Delos, asking counsell at his mouth for remedie of their plague: that they should double his cubick Altar: which Plato construed, that they must studie Geometrie: How much more ought all such as trauaill by Sea, and especially our English Mariners, reioyce and resolue them-selues of the worthinesse of this woork: and hereby (no doubt) haue no lesse cause dulie and daylie to pray for you by sea, then an infinit number of others her Maesties good subiects, for your bountie, pietie, and Iustice vprightly ministred do zealously by lande.

As for the vnskilfulnesse in handling hereof, I haue no other meanes to couer it, but as the Poet Accius did his shortnes, who being a person of a verie lowe stature, pourtraied for himself a verie tall picture: so I, being but of smale desert, haue gotten me a most honorable & worthy patron. Following herein Teucer, who thought himself saif vnder the shield of Aiax: protesting, that, as by the daily most comfortable testimonies of your especiall fauour and goodnes towards mee, I am aboue all men liuing most bounden to you. So do I acknowledge mee your onlie owne, and do vtterly disclayme of any maner interest in my self: which, with this; and ought els within the compasse of my litle power whatsoeuer; I humblie offer vp vnto your L. as a pledge of my most dewtifull and faithful affection to you & yours. And thus all together vnable to satisfie my self in sufficiently expreßing my thankfull minde and loyall hart, with my feruent prayer I commit the rest to be supplied by the giuer of all goodnesse, whom I most humbly beseeche bountifully to reward your L. with increase of Honour and all happines, in this world, and after a longe race heroically run, a crowne of euerlasting honour.

From the Court at S. Iames. 20. Octob: 1588.

Your L. most Bounden and Deuoted.

A: Asshley.

THE AVTHORS ADMONITION TO THE READER.

Reendly Reader, forasmuch as all skilfull and experienced in the art of Nauigation, do well know, that certein of the sandy coastes and shoares, as also diuerse mouthes & entries of riuers, aswell of *Holland* and *Frizeland* as of *Yutland* (which in old time was called *Cimbrica Chersonesus*) and of other countries, are moueable, & haue not alwaies their being in one self place, as in these Tables or Chartes, rightly, fitly & faithfully they are set down: I could do noleſſe then admonish thereof, that thou mightest diligently obserue and marke them by these Mappes, as thinges most necessarie to be regarded. For it is perfectly knowen to all Pilots and Masters, that, by force of tempests and violence of boisterous windes, huge heaps of sand are so dispersed, that at length they are made euen with the plaine Sea-shore. VVhich *Ketelaune* of *North Holland*, the yle *Busk* or *Corensand*, lying betwixt *Lawers* and *Scilla*, neere the shore of *East Frizland*, and the better part of *Ameland* in this our age, do most euidently & certeinly bewray. For these Sand-hils are in such sort blowen abroad and scattered, that at this day they can scarcely be perceaued, nay they do scant differ in shew from the plaine low shore: especially *Buske* or the Ile of *Corensand*, which hath been so notably metamorphosed, that in a raging and wrought sea it is quite ouerflowen at an high water. In like maner all Masters and Pilots do vnderstand, that, by force and violence of outragious stormes (which cause most mighty and ouerthwart billowes) diuerse sandy entraunces and Chanels of the Sea alongst the foresayd coastes, are sometimes choaked with sandes, and sometimes do shift their seate. VVherfore by the lawe of the Sea, such places are expresly forbidden to bee entered without sounding: and therefore they are called VVaters of Pilotage. I haue obserued and marked these strange chaunges of late yeres, both in the *Maze* and elswhere: and therfore do find this most true, that for the former causes, many hauens are decayed, and many are altered, as the olde *Ripe-deep in Yutland* doth sufficiently manifest the same: which hauing had his chanell heretofore betweene *Rim* and *Manu*, hath it now welneere two leagues more Northward betweene *Manu* & *Fanu*. But these onely may suffice for examples sake. And although all these and such like alterations, which haue hitherto beene found, are with great care faithfully corrected and reformed by me in the pourtraicts and descriptions of these Sea-Cardes: yet could I not omit this my well meaning and sincere admonition for two causes: First, that by these examples thou mightest vnderstand, that vpon the like causes, the like chaunges may happen: next that the vnskilfull and especially the enuious backbiter and carper, may haue no matter to cauill, nor occasion to carp: seeing that things to come, and vncerteine, can by no meanes possible, bee perfectly described. And for that it is but too apparant, how much euell speach, hatred and enuy preuayle in this our wretched age: I haue thought good to rehearse briefly in this place the beginning and progresse of this my labour. First I endeuoured by all my studie, paines, diligence and care to draw the generall Sea-Cardes, and the other particuler plots, exactly and faithfully (as became mee) and in the most faultlesse forme that I could: because on them both the liues and goods of such as traficke and trauill by Sea do depend. VVhereby it came to passe, that many yeres since (be it spoken without enuie) they haue been so highly accoumpted of: that I was earnestly required and oftentimes importuned, of diuerse skilfull Pilots and Masters in these countries, besides many principall and rich Marchants, and owners of ships, to print and publish the same, for the furderance of salfer sea-faring, & the behoofe and benefit of the inhabitants of *Holland*, *Zealand* and *Frizland*, which most of all vse traffique by Sea. At that time for many causes, I yeelded not to their requests: specially for that my meane abilitie was not sufficient to defray so great expese. But at length, ouercome by the importunat suite of Mariners, Masters, and Marchants: but chiefly by reason of my sincere loue and affection towards the commonweal, and posteritie: with the continuall instance and exhortation of many persons, of qualitie & iudgemēt which egged me on, and bosh with promises and performance, holpe & furthered the worke: I set vpon it with a cheerefull minde, and incessant labour: And printed the first part of this Mariners Mirrour, which conteineth the whole western Nauigation, to wit, of the coastes of *Fraunce*, *England*, *Ireland*, *Scotland*, *Spaine*, *Portugall* &c. & published it in the yere of our Lord .1583. being dedicated to the most famous Prince of *Oreuge* of happy Memorie, who tooke no small delight therin: and of his great bountie bestowed large allowance towards the finishing of the worke begun. VVherefore presently I betooke my selfe to the second part: beyng aduertised in the meane time, by the skilfullest Pilotes, Masters, and Mariners, with how great commendation the first part was receiued, and how profitable it was found, for all such as trauayle by Sea: which I leaue to bee remembred of others.

Moreouer I, was enformed by many Pilots of good credit, with how great good-liking these Sea-Cardes were receaued in many other countries & kingdoms: namely by these most famous and learned men *Io. Dowza Baron* of *Nortwick*, and M. Doctor *Maelson* who this last yeare were Embassadours for the States of the vnited Prouinces of the low countries, vnto the most renowmed Queene of England: where a booke of these Sea-cardes was presented at the Counsell table, by the moste Noble Lorde, *My Lorde* Charles Howard, *Baron of Effingham*, *Lorde Admirall of England*, and was esteemed by the chief personages of that graue Counsell, worthy to be translated and Printed into a language familiar to all Nations, that it might bee both read and vnderstood of all. VVherefore from that time, I purposed with my selfe, to performe the same, assoone as I might. Shortly after I printed and published the other part of this MIRROUR, which coprehendeth the whole Nauigation of the *German*, *Scottish* and *North Ocean*, as also of the Northeast and *Baltik Sea*. This I dedicated to the States of *Holland* and *Westfrizland*, who gratiously and thankefully receauing it, rewarded mee with such recompence as whilest I liue I shall neuer be able to deserue. This encouraged mee, vpon the former reasons, to procure, that the descriptions of these Cardes might be translated into Latine: to th end, that al nations, which vnderstand that language, might reape both profit and pleasure out of the same: hoping that it will be very profitable vnto all those which are studious in the knowledge of Nauigation, and noleſſe acceptable to al courteous readers, who may take likyng therof & accept of this my labour in thankefull manner.

Fare well. From *Einchusen*. 1586.

OPERIS COMMENDATIO.

PRIMVS inexpertis nauim qui crēdidit Auſtris
Tiphys, & ignotis remos lentauit in vndis,
Sæpe vado illiſam confregit in æquore puppim;
Sæpe errore viæ, vel tempeſtatibus actus
Præcipiti prenſas amiſit turbine naues.
Per mare ſecuri vitam nunc quærite Nautæ.
Tutum iter, ac placidos vobis dant æquora curſus,
Auſpicio liquido: notis iam vela licebit
Portubus inſinuare: imi iam forma profundi,
Et vada ſe tangi patiuntur lumine claro:
Ingenio tota iſta tuo laus debita & arti,
Gnaue AVRIGARI, qui tam bene direxiſti
Per freta morigero volitantem flamine currum,
Quàm ſi vſurpatum manibuſque & poplite vtroque
Oceani fundum ac breuia omnia perreptaſſes.
Quinetiam, ne quid pelagi ſcrutator Eoi,
Aut Aquilonaris deſideret; è mare ſeſe
Vt quæque oſtendat regio procul, oſtendiſti.
Clarius in SPECVLO nec ſe Venus ipſa tuetur,
Tota in charteolo quàm ſeſe hîc æquore Tethys.
Macte, ô, Nereïdum thalamos qui intrare repoſtos,
Auſus, & attonitas trahere ad ſpectacula phocas,
Delphinumque ſubire domos. tibi cærula Prothêi
Alludunt armenta; tuis Matuta gubernis
Summittit faſces; te prono gurgite Doris
Et mulcet rauco Tritonia buccina cantu;
*Teſce Colao. Squammigenis vix nota, *COL â dum certius ipſo
Exploras adyta, ac Tethydis ſecreta recludis.
Quò mihi Cymmerios, & ſubterranea Regna
Damnatoſque geli ſcopulos, duce MAGELLANO,
Viſere, & intactos Auſtri penetrare receſſus?
Quò Stygios tentare Lacus? Apage Argonautas
Heſperios: ſatis, extremâ, mî, hærere Celocis
Parte tuæ; ſatis eſt, Tabulas ex ordine pictas
Spectantem, Arctoi poſituram diſcere Nereï,
Et noſtri conuexa Poli. Quis nouit? an olim
RIPHÆI hinc quoque ſe retegant, LVCA indice, MONTES;
Pacatos vbi HYPERBOREOS videamus, Iberas
Quò necdum vlla rates Cynoſura aut Linea duxit.

I. Douſa.

THE SAME ENGLISHED IN PRAYSE OF THE VVOORK.

TIphis, Who first set sayle to the Windes Which blasted yet vntried,
And first bended his oares, in streams Which waued yet vnknowni
Oft did he bruze his keele, on shoalds, and oft vpon hard rockes,
Oft by the course not kept, or mayn-storme mightily driuing,
With furious Whirlewinds, his ships made Wrack in a tempest.
Now Mariners henceforth at Sea may ye liue very careless,
For that a saulfe iourney cleered from daungerous extreames,
Is for ye prepared. For now may ye into good harbour
Hale euen at pleasure now doth lo the forme o the mayn-deepe,
And all shoalds proffer themselues to be cleerly beholden.
All this prayse is dew to thy Witt, to thy paines, to thy charges,
Ingenious VVagener, Which hast so worthily guyded,
That Wagon on Mayn-sea Which winds cause flie to the compasse;
As if vpon thy both hands and knees With curious inlight
Strongly thy selfe hadst crept, and searcht out th' Ocean although.
Moreouer vnlesse that perauenture a Searcher of East-seas,
Or Northren passage, should want any thing that he searcheth:
Thou shewst each Region farr of, What sort it ariseth.
Nor Venus in Mirrour could view her selfe any cleerer,
Then Tethys in this Glasse may well discerne her apeerannce.
Hold on a mayn valiant courage With vertue auanced,
Thou that durst the secreat closet of Seagoddeses enter,
And draw th' astonished Sea-calues to the gaze to behold thee.
And lodge With Dolphins in the deep: thee th' azured Whole skulls
Of Proteus pasture reuerence: Maruta the Sea-queene,
Yeelds thee vp her Regiment: Lady Doris stoopes lo thy handmayd,
Neptunes Musicien studieth With his horne to delight thee:
While thou a more certein searcher then Cola the straunge-fish
Searchest out th' entries scant known to the Meyny o fishes,
And openest th' hidden secreats of th' old Lady Tethys.
What profit in searching darke realms, sited vnder horizon:
And Rocks condemned to be pincht With a frost neuer ending:
Or to go With Magelan to the South sea passages vtmost.
What profit in Styx lake: Ile none of your Argos auenturs
V Vestern discouerers: tis enough for mee t' haue a corner
In this swift caruell to behold these Tables in order:
And learne how Northern Nereus hath spred many braunches.
And What in our regiõs th' heights are: Who knows Whither one day
This Lukes discouerie shall rayze those Riphean hil-topps
Where the Hyperborean long-liud people are to be found out:
Though thither yet no star, nor lead, hath led any Spaignard.

A NOTE OF CERTEIN WONDERFVL and most dangerous places in the Sea, which *Wagenar* hath set downe in his Epistle to the Prince of Orenge.

AMonge the merueilous workes, that the Almighty God hath created both vppon and in the Sea, by, and alongst all coastes: besides all other dangers Wherevnto the sea-faryng men are subiect, as tempests, stormes, Windes, sandes, rockes, &c: there are certeine places, Where the Waues and flouds, do so encounter each other, and engoulph them-selues With such violence and Swiftnesse, that many shippes, men and goods haue been cast away er they were ware of them. The principall & most perillous of all, is the Maelstreame, Well or Slorp, called the Mouskstream, Which lieth on the backside of Norvvay, in 68. degrees on the North-side of an Iland or Rock called V Veeray. This Well draweth the Water vnto it selfe duryng the Whole floud (Which is the space of sixe howers and .xij. minuts) With such an vndraught and force, and With such a noyse, thorow the tombling & falling of the Waues and streames the one vppon the other that it is rather to Wonder at then to Write of. So that during that time, With in the space of more then two leagues rounde about that Rock of Mousk (vnder Which that Water floweth) no shyp or other vessell may come neare, for they should to their vtter destruction be drawen into it & swallowed vp. But all the time of the Ebbe, the Water is so strongly cast vp agayne, that no kinde of substance or mettell, how heauy so euer it bee, can there sincke. So that the Northren Fishers at that time do With their Jollen or fishing boates, take many and strange formed fishes, Which they draw vnto their boates With hookes & lines, Which they haue ready layde for that purpose: for that, during the ebbe, they cannot returne into the goulphe, nor get vnder the Water by any meanes.

The Northren people that inhabite about those Rockes, do thinke, that that streame passeth away vnderneath a parte of Norvvay vnto the North bottom in East Finland: because in that place there is likewise such a Maelstream, though not altogether so strong nor daungerous: Where the like fishes are taken and the Water is in like sorte troublesom, as it is vnderneath and aboute the Rock of Mousk.

Wheruppon many experimented Pilots, do call the sayd Slorp the Nauell of the sea: Which causeth the course of the Ebbes and Flouds about al the lands that are on this Northside of the Equinoctiall, as the most conuenient place for that purpose to spreade the Waters South, North, East and West, that is to say, Northerly towardes the Pole Artick: South easterly on the backside of Russia and Tartarie, towardes the streict of the great South-sea called Mar del Sur: Wherin the Spicerie Islands called the Moluccas, neare the Equinoctiall are lyng: SouthWards, towards the North-sea of these Lowe countries: as also on the backside of Scotland, and Ireland, towards the Spanish and Atlantick seas: And towards the NorthWest beyonde Izland towardes Furbushers streicts, Where it is thought the Way vnto Caray may be found.

There are more ouer to be feared vppon the Western seas very dangerous streames and goulphs, as is the Ras of Portland, Where oft times happeneth such a turnyng and tombling of Waues and streames, that the Ships Which passe that Way are many times in great perill.

Moreouer the Ras of Blancquert between Normandie and the Isle of Alderney, roreth and rageth so dangerously, that many shyps fal therin hedlong so deep, that soddenly they are swalowed vp and sunck vnto the very bottom.

The Ras of Founteney is more daungerous then all these, Wherin many smale vessels & barks of Britteny & of other countries are suddenly deuoured and cast away. And the entrance of ꝑ Garronne, called the Riuer of Bourdeaux, between the two Vrs of Cordam and the Southern & Northern Asses, is likewise very perilous and many shyps do often perish there, if the Pilots be not skilfull & well acquainted With the place. And these be the most daungerous goulphs and streames in the northern and Western seas, Wherof it behoueth the seafaryng man to take speciall heede.

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WHosoeuer will vse these Charts of seafaring as they ought, and as the practise it selfe requireth: must first know and diligently marke, that the seuerall arisings and appearing of euery country are particularlie pourtrayed in the vppermost part of the Charte or else, where is greatest roome: and sometimes in the mappe following for the fitnes of the place: as appeareth in the Charte of Flaunders, where the chiefe appearances of Holland and Zealand are set downe in the vppermost part of the Charte, in the same fashion as they shew and appeare first, to those which come from the sea, which may be knowen by mountaynes, valleys, woodes, hils, cliffes, townes, cities, beakons, or capes, &c. But after that the coast is descried, a skilfull Pilot must consider, how he may saile thither: and vpon what point of the compasse the hauen or riuer lieth: what banks, shoalds, saile sands, rockes vnder and aboue water, what blind rockes you must shunne, and what depth is neere the shoare. And being come nearer, what shoare markes, steeples, windmils, hils and cliffes, & what trees are to be brought in one to come to the true depth or channell. Moreouer how the Buyes be set neare the hauens or riuers both in going out and comming in, and how farre they lie one from another. And that is expressed at large and in good order in the seuerall description of euery Charte. And seing that many which were neuer at Sea will not without cause meruaile when they see these particuler maps, why in some coasts, riuers, and other Inland waters, the townes, towres, rockes, and other markes or signes do seeme on oneside to stand vpright, and on the otherside cleane contrarie: The gentle Reader shall vnderstand that in the particuler Chartes I haue treated little thereof, as a matter not incident to the treatie of Nauigation. But forasmuch as Pilots, Shipmasters, Mariners, and many others (whom it specially concerneth) which set out daylie to the seas, haue hitherto continually vsed, & as yet do allwaies vse the like charts: so that with the least alteration thereof they may often put in daunger their ship & goods: I thought it not requisite by and by to change the same: although I know and haue prooued for certauntie, that it will seeme very absurde and against reason to all cunning & skilfull men: whom I earnestly desire for that cause to haue me excused: least by reason of the straungnes and such doubtfull alteration, those which go to the sea should be brought to any doubt or confusion, wherby many daungers and discommodities might ensue. And let it not seeme straunge to any if peraduenture some of the sea coastes, hauens, countries, &c. appeare not so fully and plainely, and shewe themselues as indeed they are, and as they are pourtraied in our seuerall Chartes. For albeit (besides mine owne skill and experience) I haue conferred and shewen whatsoeuer is contained in this booke to diuers Shipmasters and expert Pilots, and haue corrected the same by their notes, who according to their seuerall experience and iudgement, haue praised and allowed all these seuerall Chartes: which since that I haue published in the same forme: yet because it is naturall for men to be deceaued, & for that diuers men haue not only diuers opinions, but also euident faults: perhaps many errors wilbe found in this booke, which a painfull and diligent Pilot will easely amend, seing it is farre easier to correct that which is already inuented, then to frame a newe.

OF THE SPECIAL PROPERTIE OF THE SEA, WHICH ASWEL IN *times past, as at this present maketh many to wonder.*

NO man doubteth that the waues of the great *Ocean*, and the force of the streame (notwithstanding a contrary Winde) doe alwayes come from the North-West, and flow very swiftly vpon all the sea coastes, & in the seas of our vsuall nauigation. The waues are mounted on such an height, and separated so farre asunder, that when two shippes are parted by such waues, each others maستes and toppes cannot be seene: Which happeneth commonly at a still water, or calme weather. And these waues are so farre distant, that you cannot shoot from one ship to another with a Caliuer. Moreouer in all the streicts or Leuant sea, the waues allwaies driue, and rise vp against the coastes, creekes, and shores, and also the little streames and riuers (notwithstanding a contrary Wind) allwaies roule vp against the shore: a thing doubtlesse, strange & wonderfull. But yet I thinke that no man hath hitherto (as farre as I know) certainly declared or defined the naturall cause of this motion. Wherefore in few words I will declare my opinion hereof. The cause of this motion may proceede (without preiudice to other mens opinions) from the North-West quarter: because many tempests and stormes arise in the North and North-West countries, by reason of the coldnes and intemperature of the ayre, land and sea: from whence blow such mighty and forcible windes, driuing and beating the sea and the waues thereof with such might, that no contrary wind can stoppe or resist the course or tossing thereof: and that happeneth by reason of the continuall succession of the waues and surges which driue one another from a coast so farre off. But some man may demaunde why it proceedeth not rather from the South-West, where the sea is widest and largest: Who may bee thus answered: That the sunne with his naturall heate doth so temper and moderate the winds, surges and waues vnder the South Clymates, that there cannot arise such great tempestes. For it is seene and prooued by daily experience in the Indian Nauigation, that the sunne being high in the South Clymates, doth make the weather calme, and the waters smooth. Contrary wise, the sunne being in the North and North-West hath no such force, but yeeldeth lesser heate: Which may bee the cause why the waues are allwayes troublesome Northwestward, and come rouling about all the sea coastes of Europe. But I beleeue that a shippe farre from the shore, and vnder sayle in the middest of the Northwest sea, perceaueth no such matter. But when you draw neare or about Newfound land, you shall doubtlesse finde againe that the floods and narrow seas within the land are stirred vp and flow from the North-east. And this, gentle Reader, is my opinion hereof, submitting my selfe to the better censure of other men. But the secretes of Almighty God, the onely creator and gouernor of all thinges, are so incomprehensible and inscarcheable, although we behold the heauens, the ayre, the land & seas: that we are altogether vnable, in respect of his omnipotencie, or rather vnworthy to iudge or set downe any certaintie thereof: but so farre as our indeuour and the compasse of our humaine wit giuen vs of God can naturally conceaue, and no farther. The rest We most humbly referre to his diuine maiestie, vntill we are chaunged from this miserable and wretched life.

AN EXHORTATION TO

the Apprentises of the Art of Nauigation.

THe first and chiefest way to attayne to the perfect skill and science of Nauigation, is, whensoeuer any Shipmaster or Mariner shall set foorth from land out of any Riuer or Hauen, diligently to marke, What buildings, Castles, Towers, Churches, Hils, Bals, Downes, Windmils, or other marks are standing on the land. All which, or many of them, let him pourtray with his penne, how they beare, and how farre distaunt: but vppon the true and certeine poynts of the Compasse, vppon which hee first set sayle, and shaped his course, whilest yet euery marke on the land may bee clearely and euidently perceaued, to the end the true arising thereof may be the better had. Hee must also very often cast the Lead, that he may most exactly note in his Compt-booke, how farre off, all the shoalds and sands lie from the shoare.

In like manner must he proceed that descrieth, and arriueth towards any other countrey, to wit: assoone as the arising and shew of the land, be it high or low, with the beakons and other markes may be plainely perceaued: straightway must hee compare them all with those our Chartes and Tables. And when the Coast is thus knowne eyther wholy or in parte: then must hee warily and diligently indeuour to seeke out and finde the true depth and channell by certeine Marks, Towers, Churches, Beakons, &c. Which are found almost at euery port, entrie, cape or poynt: and no lesse heedfully consider, how his course lyeth inwardes and outwardes. Any Mariner that will diligently, and with vnderstanding practise these preceptes, shall attayne the true skill and science of Nauigation. For that which any man either young or olde exerciseth, searcheth out and obserueth himselfe, sticketh faster in memory, then that which he learneth of others. Notwithstanding let him not neglect, nor shame to enquire of the Master of the shippe, and other men exercised in this study, the situation of countries, the courses vpon seuerall poynts, the depths or soundings, and the eleuations of the Pole: and practise with the Crosse staffe, and Astrolabe. The which two, are the principall instruments (next the Compasse) that belong to safe and skilfull seafaring.

This admonition and instruction is here set downe, onely for the helpe and furtherance of young beginners in this Art.

A TABLE OF THE PRIME, OR GOLden number, and of the Epact according to either computation.

Golden Numb.	New Epacts	Th'old Epacts
1	1	11
2	12	22
3	23	3
4	4	14
5	15	25
6	26	6
7	7	17
8	18	28
9	29	9
10	10	20
11	21	1
12	2	12
13	13	23
14	24	4
15	5	15
16	16	29
17	27	7
18	8	18
19	19	29

A vvay to finde out the Golden number, vvithout Ephemerides or Kalender.

IF you will finde out the golden number of the yeare of our Lorde 1588. caſt away 1500. yeares, and deuide the 88. that remaineth by 19. (which is the full number of the circle of the Moone) and there remaineth 12. Which is the golden number of this yeare to which for euery yeare following adde one vntill you come to 19. Which is the laſt number of the Circle of the Moone. Then reckon againe the number in order viz. 1. 2. 3. &c.

This golden number is called the circle of the moone, becauſe in the ſpace of 19. yeares, the Moone after hauing made all her changes and coniunctions with the Sunne, and paſſed thorow the ſignes of the Zodiacke, beginneth agayn to change, almoſt at the very ſame houre and day as before.

How to finde out the Epact without an *Ephemerides*, or Almanacke, according to the new ſtile.

YOu muſt haue the Golden number readie in your minde by the former rule, Which you ſhall recken vpon the ioyncts of your thombe, from the loweſt to the vppermoſt: and if your accompt do ende at the loweſt ioint the Golden number and the Epact ſhalbe one. But if it ende vpon the ſeconde, adde 1. to the Golden number, Which beyng put together make the Epact for that yeare: But if it endeth on the higheſt ioynt adde. 20. to the golden number and ſo beyng put together, you haue the Epact: But if it paſſe. 30. caſt that away and keepe the remainder for your Epact.

For example.

I would know the Epact of the yeare 1588. I finde the Golden number to be 12. by the rule aforeſayd: Which being reckened endeth vpon the vppermoſt ioynt of the thombe: and therfore do I adde 20. to the Golden number which maketh 32. ſo that 2. is the Epact for that yeare, Which is alſo expreſſed in the former table.

That you may learne the time of the new Moone rightly from the yeare. 1588. to the yeare 1606.

SEeke in the Table folowyng the Golden number of the yeare for which you ſeeke in the firſt Colomne, and you ſhall finde in the ſide entrance the newe Moones for the whole yeare through all the monthes, what day, houer and minut they are. (Which as Vlacenar made accordingto the new ſtile & Calculated for the Meridian of Enchuyſen, ſo here they are reduced to the olde ſtile and calculated to the Meridian of London,) It happeneth ſometimes that two newe moones are in one moneth, Which the Table will ſhew. But after the time of 1606. is expired: this Table geueth you the newe Moones accordyng to the middle or equall motion of both lights vpon the ſame day, but deducting an howre and a halfe, and hauyng regarde to the Leape yeare.

A Table

A TABLE OF THE NEVV MOONES FOR THE MERIDIAN OF LONDON.

	Golden Numb.	Ianuarie Da.	Ho.	Mi.	Februare Da.	Hc.	Mi.	Marche, Da.	Ho	Mi.	Aprill, Da.	Ho.	Mi.	Maie. Da.	Ho.	Mi.	Iune. Da.	Ho.	Mi.
1596	1	18	22	11	17	14	46	18	6	8	16	22	38	16	14	19	45	5	16
	2	7	10	24	5	22	38	7	11	18	6	2	14	5	16	58	4	7	52
	3	26	11	58	24	22	23	26	9	26	24	21	12	24	10	3	22	23	56
	4	16	4	8	14	14	1	15	23	2	14	8	5	13	17	35	12	8	26
	5	5	17	38	4	5	56	4	15	49	3	0	12	2 / 31	7 / 15	49 / 38	30	0	33
	6	23	17	5	22	6	13	23	16	34	22	1	3	21	8	0	19	15	4
	7	12	19	38	11	14	5	12	4	38	11	15	56	11	0	48	9	8	21
1603	8	1 / 31	29 / 14	10 / 38	No	N.	M.	2	9	2	1	0	58	29	23	59	28	8	25
	9	20	14	38	19	8	50	20	2	1	18	18	38	18	10	8	16	20	38
	10	8	20	44	7	11	58	9	3	5	7	19	36	7	11	11	6	2	4
1606	11	27	19	31	26	8	55	27	22	11	26	11	58	26	2	50	24	18	0
1588	12	17	10	13	15	23	34	16	13	95	15	5	4	14	20	33	13	11	51
	13	6	1	7	4	11	34	5	22	25	4	10	25	3	23	14	2	12	56
	14	25	3	22	23	13	13	24	22	18	23	8	27	22	18	41	21	6	29
	15	14	18	1	13	5	28	14	14	38	12	23	13	12	7	29	10	16	7
	16	4	3	55	2	18	18	3	6	18	1	15	58	1 / 30	0 / 7	0 / 20	28	14	55
	17	22	0	17	20	16	23	22	5	33	20	16	3	20	0	20	18	7	44
	18	11	0	10	9	19	21	11	12	48	10	2	24	9	14	41	8	0	10
1595	19	29	18	50	28	13	20	13	6	34	27	22	8	28	11	16	26	21	55

	Golden Numb.	Iuly. Da.	Ho.	Mi.	Auguſt. Da.	Ho.	Mi.	Septemb. Da.	Ho	Mi.	October. Da.	Ho.	Mi.	Nouemb. Da.	Ho.	Mi.	Decemb. Da.	Ho.	Mi.
1596	1	14	18	38	13	5	53	11	16	22	11	2	24	9	12	23	8	22	50
	2	3	22	38	2	13	3	1 / 30	2 / 15	40 / 38	30	3	42	28	14	51	38	1	34
	3	22	14	52	21	6	28	19	22	18	19	13	44	18	4	50	17	16	55
	4	11	16	50	10	7	14	8	23	22	8	16	57	7	10	32	7	3	9
	5	29	11	32	28	0	56	36	17	2	26	11	11	25	6	18	35	0	48
	6	18	22	38	17	8	12	15	20	12	15	11	14	14	5	51	14	0	14
	7	8	14	59	6	21	38	5	6	59	4	18	18	3	7	24	2	23	59
1603	8	27	15	53	26	0	4	24	7	38	23	18	7	22	6	38	21	21	39
	9	16	6	53	14	16	38	13	0	38	12	9	28	10	19	38	10	7	16
	10	5	14	59	4	3	23	2	15	34	1 / 31	1 / 32	20 / 28	29	19	38	29	7	48
1606	11	24	8	46	22	22	23	21	13	3	21	1	41	19	13	28	18	23	43
1588	12	13	2	58	11	16	38	10	5	32	9	17	7	8	4	16	7	14	50
	13	2 / 31	2 / 16	57 / 23	30	10	58	29	2	7	28	16	38	27	5	24	26	17	1
	14	20	20	23	19	11	29	18	4	0	17	21	29	16	14	8	16	5	8
	15	10	2	11	8	14	23	7	5	0	6	21	26	5	15	59	5	10	25
	16	28	23	41	25	10	18	26	23	38	24	15	50	23	10	25	23	5	46
	17	17	15	10	15	22	51	14	8	25	13	20	28	12	11	33	12	5	10
	18	7	8	3	5	15	38	3	23	14	3	8	21	1	19	22	1 / 31	0 / 1	56 / 5
1595	19	26	7	38	24	16	3	23	0	44	22	9	41	20	20	4	20	6	57

A VVAIE TO FINDE OVT THE LEAPE YEERE WITHOVT *eyther Calender or Ephemerides.*

DIuide the yeeres of our Lord by 4. and if nothing remayneafter the diuision, that yeare is Leape yeare, but if the number of 1. 2. or 3. shall remaine, it signifieth what yeere it is after the Leape yeare. As for example. Take the yeare since the Natiuitie of Christ, 1588. which beeing diuided by 4. nothing remayneth, wherefore it is Leape yeare. And the yeere 1589. the first after the Leape yeere. The yeare 1590. the second, & the yeare 1591. the third. But the yeare 1592. shall bee a Leape yeare againe, and so forwards.

OF THE DECLINATION OF THE *Sunne, and the vse thereof.*

FOr asmuch as for many and waighty causes ten dates are once for euer cut off from the yeare by certaine Monarchs of Europe as needlesse, that thereby the Equinoctiall or Solstitiall pointes might bee brought to the same dayes of the moneth as of olde time they were, in the time of the Nicene councel: and so the 4. seasons of the yeare (viz.) the Spring, Summer, Haruest, and Winter, begin on the same dayes as they were wont.

And furthermore as the appearances and suppositions of the 8. sphere do shew a manifest inequality in the greatnes of the sunne: so in continuance of time, as apparant an alteration is perceiued in his greatest obliquation. For by the obseruations of Eratosthenes, Hipparchus, and Ptolomy, of which, the two first liued a little before the beginning of the Romaine Empire: and the third, a little after: the greatest obliquation of the sunne was found to be almost euen with his vtmost declination: so that in the time of Iulius Cæsar, and the beginning of the Romaine Empire, the greatest was of 23. degrees, and 52 minutes. But afterward it decreased by little and little, as plainly appeareth by the obseruations of Albategnius, and since by Arzahel the Spanyard, Almeon, Almanzor, Prophatius the Ievve, and many others, which for this last hundred yeares, by the diligent study, and obseruing of George Purbachius, Iohannes Regiomontanus, Vernerus, Copernicus, &c. is yet found still decreasing: so that at this time, it is well neare vpon the last and farthest poynt, (viz.) in 23. degrees, and 28. minutes, or at least wanting a feld seconds.

Therefore Wagener thought it not impertinent to set downe the table of the declination of the Sunne for the behoofe of all Pilots, Shipmasters, and all kinde of Saylers, aswell according to the right course of the sunne, as this apparant obliquation of our time: hoping that he should doe therein that which should be acceptable, and not vnprofitable vnto them. But it hath since beene thought fitter for vs in England to follow our auncient and accustomed stile, not acknowledging any such perfection of the Gregorian reformation.

OF

OF THE VSE OF THE

Table following for the Sunnes declination.

FIrst you must know whether it be a Leape yeare, or the first, second, or third yeare after the Leape yeare: and when you vnderstand the same, entring the Table of that yeare, you shall seeke out your purposed moneth and day in the toppe and side titles: for the common Angle will shew the declination of the sunne, for the same day, northward from the 10. of March to the 13. of September, and southward from the 13. of September to the 10. of March, and these dayes are marked thus +.

Now if you desire to knowe the latitude of any countrey or height of the Pole, take the meridian height of the sunne by your Astrolabe or Crosse staffe, and it will shewe the distance of the sunne from the Zenith, or highest poynt. And if the declination of the sunne be Northward the same day, adde it to the distance of the sunne from the Zenith. But contrary wise deduct it againe if the declination be Southward, and you shall haue the latitude of that place, or the altitude of the Pole. As for example. VVagener in the yeere 1583. the 21. of January, tooke by Astrolabe at Enchuysen the meridian altitude of the sunne about 20. degrees, and 50. minutes: Wherefore the distance thereof from the Zenith is neare 69. degrees, and 10. minutes. In the Table of the declination of the Sunne the third yeare after the Leape yeare, hee found the same day (after his accoumpt) the obliquation of the sun in 17. ♒ 20. minuts southward, Which being deducted from the distance of the sunne from the Zenith, because it is Southward, there remaine 52. degrees, and 50. minuts, Which is the latitude or altitude of the Pole of the Citie of Enchuysen.

In the yeare 1588. the 8. of July, at London the meridian altitude of the Sunne was obserued 59. degrees, 28. minuts. VVherefore his distaunce from the Zenith is 30. degrees, 32. minuts. In the Table of the Sunnes declination for the Leape yeare I find for that day the Suns Northren Obliquation 21. degrees, 2. minuts, Which added to the Sunnes distance from the Zenith, because it is Northerly, maketh the Whole 51. degrees 34. minuts, Which is the true latitude of the place, or altitude of the Pole for the Citie of London.

THE DECLINATION OF THE SVNNE,

for the first yeere after the Leape yeere.

Ianuarie.			Februarie			Marche.			Aprill.			May.			Iune.			July.			August.			Septēber			Octōber.			Nouem.			Decemb.		
Da.	De.	Mi	Da.	De.	Mi	Da.	De.	Mi	Da.	De.	Mi	Da.	De.	Mi	Da.	De.	Mi	Da.	De.	Mi	Da.	De.	Mi	Da.	De.	Mi	Da.	De.	Mi	Da.	De.	Mi	Da.	De.	Mi
1	21	42	1	12	48	1	3	30	1	8	27	1	17	55	1	23	6	1	22	9	1	15	21	1	4	36	1	7	2	1	17	31	1	23	3
2	21	33	2	13	28	2	3	7	2	8	49	2	18	10	2	23	10	2	22	1	2	15	3	2	4	13	2	7	25	2	17	47	2	23	8
3	21	23	3	13	8	3	2	44	3	9	11	3	18	25	3	23	14	3	21	53	3	14	45	3	3	50	3	7	48	3	18	3	3	23	12
4	21	12	4	12	48	4	2	20	4	9	32	4	18	40	4	23	17	4	21	44	4	14	27	3	3	27	4	8	11	4	18	19	4	23	16
5	21	1	5	12	27	5	1	56	5	9	53	5	18	54	5	23	20	5	21	35	5	14	8	5	3	4	5	8	33	5	18	35	5	23	19
6	20	50	6	12	6	6	1	32	6	10	14	6	19	8	6	23	22	6	21	26	6	13	49	6	2	41	6	8	55	6	18	50	6	23	22
7	20	38	7	11	45	7	1	8	7	10	35	7	19	22	7	23	24	7	21	16	7	13	30	7	2	18	7	9	17	7	19	5	7	23	24
8	20	26	8	11	24	8	0	45	8	10	56	8	19	35	8	23	25	8	21	6	8	13	11	8	1	55	8	9	39	8	19	19	8	23	25
9	20	13	9	11	3	9	0	21	9	11	17	9	19	48	9	23	26	9	20	55	9	12	51	9	1	32	9	10	1	9	19	33	9	23	26
10	19	59	10	10	41	10	0	3	10	11	37	10	20	0	10	23	27	10	20	33	10	12	11	9	1	8	10	10	23	10	19	47	10	23	27
11	19	45	11	10	19	11	0	27	11	11	57	11	20	12	11	23	28	11	20	33	11	11	51	10	0	45	11	10	45	11	20	0	11	23	28
12	19	31	12	9	57	12	0	51	12	12	17	12	20	24	12	23	28	12	20	21	12	11	31	11	0	21	12	11	6	12	20	13	12	23	28
13	19	16	13	9	35	13	1	15	13	12	37	13	20	36	13	23	28	13	20	9	13	11	11	12	0	3	13	11	27	13	20	26	13	23	27
14	19	1	14	9	13	14	1	38	14	12	57	14	20	47	14	23	27	14	19	57	14	10	51	13	0	27	14	11	48	14	20	38	14	23	26
15	18	45	15	8	51	15	2	1	15	13	17	15	20	58	15	23	26	15	19	44	15	10	29	14	0	51	15	12	9	15	20	50	15	23	24
16	18	31	16	8	29	16	2	24	16	13	36	16	21	8	16	23	24	16	19	31	16	10	29	15	1	15	16	12	29	16	21	1	16	23	21
17	18	16	17	8	7	17	2	47	17	13	55	17	21	18	17	23	22	17	19	17	17	10	8	16	1	38	17	12	49	17	21	12	17	23	19
18	18	0	18	7	44	18	3	10	18	14	14	18	21	28	18	23	19	18	19	3	18	9	47	17	1	38	18	13	9	18	21	23	18	23	16
19	17	44	19	7	21	19	3	33	19	14	33	19	21	38	19	23	16	19	18	49	19	9	26	18	2	1	19	13	29	19	21	34	19	23	13
20	17	28	20	6	58	20	3	56	20	14	51	20	21	47	20	23	12	20	18	35	20	9	5	19	2	24	20	13	49	20	21	44	20	23	9
21	17	11	21	6	35	21	4	19	21	15	9	21	21	56	21	23	8	21	18	20	21	8	45	20	2	47	21	14	9	21	21	55	21	23	4
22	16	54	22	6	12	22	4	42	22	15	27	22	22	4	22	23	4	22	18	5	22	8	21	21	3	11	22	14	29	22	22	2	22	23	59
23	16	37	23	5	49	23	5	5	23	15	45	23	22	12	23	23	0	23	17	50	23	7	59	22	3	34	23	14	49	23	22	11	23	22	54
24	16	19	24	5	26	24	5	28	24	16	2	24	22	20	24	22	55	24	17	34	24	7	37	23	3	57	24	15	8	24	22	19	24	22	48
25	16	1	25	5	3	25	5	51	25	16	19	25	22	27	25	22	50	25	17	18	25	7	15	24	4	20	25	15	27	25	22	27	25	22	42
26	15	43	26	4	40	26	6	14	26	16	36	26	22	34	26	22	44	26	17	2	26	6	52	25	4	44	26	15	46	26	22	34	26	22	36
27	15	24	27	4	17	27	6	37	27	16	52	27	22	40	27	22	38	27	16	46	27	6	30	26	5	7	27	16	4	27	22	40	27	22	29
28	15	5	28	3	54	28	6	59	28	17	8	28	22	46	28	22	31	28	16	29	28	6	8	27	5	30	28	16	22	28	22	46	28	22	22
29	14	46				29	7	21	29	17	24	29	22	52	29	22	24	29	16	12	29	5	45	28	5	53	29	16	40	29	22	52	29	22	14
30	13	27				30	7	43	30	17	40	30	22	57	30	22	17	30	15	55	30	5	22	29	4	59	30	16	57	30	22	58	30	22	6
31	14	8				31	8	5				31	23	2				31	15	38	31	4	59				31	17	14				31	21	55

The second yeeres declination of the Sunne.

January.			February			Marche.			Aprill.			Maie.			June.			July.			August.			Septēber			October.			Nouemb.			Decemb.		
Da	De	Mi	Da	De	Mi	Da	De	Mi	Da	De	Mi	Da	De	Mi	Da	De	Mi	Da	De	Mi	Da	De	Mi	Da	De	Mi	Da	De	Mi	Da	De	Mi	Da	De	Mi
1	21	46	1	13	53	1	3	36	1	8	22	1	17	52	1	23	4	1	22	11	1	15	25	1	4	42	1	6	56	1	17	27	1	23	3
2	22	36	2	13	33	2	3	12	2	8	44	2	18	7	2	23	8	2	22	3	2	15	7	2	4	19	2	7	19	2	17	43	2	23	8
3	21	26	3	13	12	3	2	49	3	9	6	3	18	22	3	23	12	3	21	55	3	14	49	3	3	56	3	7	42	3	17	59	3	23	12
4	21	15	4	12	53	4	2	25	4	9	27	4	18	37	4	23	16	4	21	46	4	14	31	3	3	33	4	8	5	4	18	15	4	23	15
5	21	4	5	12	33	5	2	1	5	9	48	5	18	51	5	23	19	5	21	37	5	14	13	5	3	10	5	8	27	5	18	31	5	23	18
6	20	53	6	12	12	6	1	38	6	10	9	6	19	5	6	23	22	6	21	28	6	13	54	6	2	47	6	8	49	6	18	46	6	23	21
7	20	41	7	11	51	7	1	14	7	10	30	7	19	18	7	23	24	7	21	18	7	13	35	7	2	24	7	9	11	7	19	1	7	23	23
8	20	29	8	11	30	8	0	50	8	10	51	8	19	31	8	23	25	8	21	8	8	13	16	8	1	38	8	9	33	8	19	16	8	23	25
9	20	16	9	11	8	9	0	26	9	11	12	9	19	44	9	23	26	9	20	57	9	12	57	9	1	38	9	9	55	9	19	30	9	23	26
10	20	3	10	10	46	10	0	2	10	11	33	10	19	57	10	23	27	10	20	46	10	12	37	10	1	14	10	10	17	10	19	44	10	23	27
11	19	50	11	10	24	11	0	22	11	11	53	11	20	9	11	23	28	11	20	35	11	12	17	11	0	50	11	10	39	11	19	57	11	23	28
12	19	36	12	10	2	12	0	46	12	12	13	12	20	21	12	23	28	12	20	23	12	11	57	12	0	27	12	11	1	12	20	10	12	23	28
13	19	22	13	9	40	13	1	10	13	12	33	13	20	33	13	23	27	13	20	11	13	11	37	13	0	3	13	11	22	13	20	23	13	23	27
14	19	7	14	9	18	14	1	33	14	12	53	14	20	44	14	23	26	14	19	59	14	11	16	14	0	21	14	11	43	14	20	35	14	23	26
15	18	52	15	8	56	15	1	56	15	13	12	15	20	55	15	23	25	15	19	46	15	10	55	15	0	45	15	12	4	15	20	47	15	23	24
16	18	37	16	8	43	16	2	19	16	13	31	16	21	5	16	23	23	16	19	33	16	10	34	16	1	9	16	12	25	16	20	58	16	23	22
17	18	21	17	8	12	17	2	42	17	13	50	17	21	15	17	23	21	17	19	20	17	10	13	17	1	32	17	12	46	17	21	9	17	23	19
18	18	5	18	7	49	18	3	5	18	14	9	18	21	25	18	23	19	18	18	7	18	9	52	18	1	55	18	13	6	18	21	20	18	23	16
19	17	49	19	7	26	19	3	28	19	14	28	19	21	35	19	23	16	19	18	53	19	9	31	19	2	18	19	13	25	19	21	31	19	23	13
20	17	33	20	7	3	20	3	51	20	14	46	20	21	45	20	23	13	20	18	39	20	9	10	20	2	41	20	13	46	20	21	41	20	23	10
21	17	16	21	6	40	21	4	14	21	15	4	21	21	54	21	23	9	21	18	24	21	8	48	21	3	5	21	14	6	21	21	51	21	23	6
22	16	59	22	6	17	22	4	37	22	15	22	22	22	3	22	23	5	22	18	9	22	8	26	22	3	28	22	14	26	22	22	0	22	23	1
23	16	42	23	5	54	23	5	0	23	15	40	23	22	11	23	23	1	23	17	54	23	8	4	23	3	51	23	14	44	23	22	9	23	22	56
24	16	24	24	5	31	24	5	23	24	15	58	24	22	19	24	22	56	24	17	39	24	7	42	24	4	14	24	15	3	24	22	17	24	22	50
25	16	6	25	5	8	25	5	46	25	16	15	25	22	26	25	22	51	25	17	23	25	7	20	25	4	38	25	15	22	25	22	25	25	22	44
26	15	48	26	4	45	26	6	9	26	16	32	26	22	33	26	22	45	26	17	7	26	6	58	26	5	1	26	15	41	26	22	32	26	22	37
27	15	29	27	4	22	27	6	32	28	16	48	27	22	39	27	22	39	27	16	51	27	6	36	27	5	24	27	15	59	27	22	39	27	22	30
28	15	10	28	3	59	28	6	54	29	17	4	28	22	45	28	22	33	28	16	34	28	6	14	27	5	47	28	16	17	28	22	46	28	22	22
29	14	51				29	7	16	29	17	20	29	22	50	29	22	26	29	16	17	29	5	51	28	6	10	29	16	35	29	22	52	29	22	14
30	14	32				30	7	28	30	17	6	30	22	55	30	22	19	30	16	0	30	5	28	29	6	33	30	16	53	30	22	58	30	22	6
31	14	13				31	8	0				31	23	0				31	15	43	31	5	5				31	17	10				31	21	57

THE DECLINATION OF THE SVNNE,
for the third yeere after the Leape yeere.

Ianuarie.			Februarie			Marche.			Aprill.			May.			Iune.			July.			Auguſt.			Septēber			Octōber.			Nouem.			Decemb		
Da.	De.	Mi	Da.	De	Mi	Da.	De	Mi.	Da.	De.	Mi.	Da	De.	Mi	Da	De	Mi.	Da	De	Mi	Da.	De.	Mi	Da.	De.	Mi	Da	De.	Mi	Da.	De.	Mi.	Da.	De.	Mi.
1	21	48	1	13	58	1	3	41	1	8	17	1	17	48	1	23	4	1	22	13	1	15	29	1	4	47	1	6	51	1	17	23	1	23	1
2	21	38	2	13	38	2	3	17	2	8	39	2	18	5	2	23	8	2	22	5	2	15	11	2	4	24	2	7	14	2	17	39	2	23	6
3	21	28	3	13	18	3	2	54	3	9	1	3	18	18	3	23	12	3	21	57	3	14	53	3	4	1	3	7	37	3	17	56	3	23	10
4	21	17	4	12	58	4	2	30	4	9	22	4	18	33	4	23	15	4	21	48	4	14	35	3	3	38	4	8	0	4	18	12	4	23	14
5	21	6	5	12	37	5	2	7	5	9	46	5	18	47	5	23	18	5	21	39	5	14	17	4	3	15	5	8	22	5	18	27	5	23	17
6	20	55	6	12	16	6	1	44	6	10	4	6	19	1	6	23	21	6	21	30	6	13	58	5	2	52	6	8	44	6	18	42	6	23	19
7	20	43	7	11	55	7	1	20	7	10	25	7	19	15	7	23	23	7	21	20	7	13	39	6	2	29	7	9	6	7	18	57	7	23	21
8	20	31	8	11	34	8	0	56	8	10	46	8	19	28	8	23	25	8	21	10	8	13	20	7	2	6	8	9	28	8	19	12	8	23	23
9	20	19	9	11	13	9	0	32	9	11	7	9	19	41	9	23	26	9	21	0	9	13	1	8	1	43	9	9	50	9	19	26	9	23	25
10	20	6	10	10	52	10	0	8	✠ 10	11	28	10	19	54	10	23	27	10	20	49	10	12	41	9	1	19	10	10	12	10	19	40	10	23	26
11	19	53	11	10	30	11	0	16	11	11	48	11	20	6	11	23	28	11	20	38	11	12	21	10	0	56	11	10	34	11	19	54	11	23	27
12	19	39	12	10	8	12	0	40	12	12	8	12	20	18	12	23	28	12	20	26	12	12	1	11	0	33	12	10	56	12	20	8	12	23	28
13	19	25	13	9	46	13	1	4	13	12	28	13	20	29	13	23	27	13	20	14	13	11	41	12	0	10	✠ 13	11	17	13	20	33	13	23	27
14	19	11	14	9	24	14	1	27	14	12	48	14	20	40	14	23	26	14	20	2	14	11	21	13	0	14	14	11	38	14	20	45	13	23	26
15	18	56	15	9	2	15	1	50	15	13	7	15	20	51	15	23	25	15	19	49	15	11	0	14	0	38	15	11	59	15	20	57	15	23	25
16	18	41	16	8	40	16	2	14	16	13	26	16	21	2	16	23	23	16	19	36	16	10	39	15	1	2	16	12	20	16	21	8	15	23	23
17	18	25	17	8	17	17	2	37	17	13	45	17	21	13	17	23	21	17	19	23	17	10	13	16	1	26	17	12	41	17	21	8	16	23	21
18	18	9	18	7	54	18	3	0	18	14	4	18	21	23	18	23	19	18	19	10	18	9	57	17	1	49	18	13	1	18	21	19	17	23	18
19	17	53	19	7	31	19	3	23	19	14	23	19	21	33	19	23	17	19	18	56	19	9	36	18	2	12	19	13	21	19	21	29	18	23	15
20	17	37	20	7	8	20	3	46	20	14	42	20	21	43	20	23	14	20	18	42	20	9	15	19	2	36	20	13	41	20	21	39	19	23	11
21	17	20	21	6	45	21	4	9	21	15	0	21	21	25	21	23	11	21	18	28	21	8	54	20	2	59	21	14	1	21	21	49	20	23	7
22	17	3	22	6	23	22	4	32	22	15	18	22	22	1	22	23	7	22	18	13	22	8	32	21	3	23	22	14	21	22	21	58	21	23	2
23	16	46	23	6	0	23	4	55	23	15	36	23	22	9	23	23	2	23	17	58	23	8	10	22	3	46	23	14	40	23	22	7	22	23	57
24	16	28	24	5	37	24	5	18	24	15	53	24	22	16	24	22	57	24	17	43	24	7	48	23	4	9	24	14	59	24	22	15	23	22	51
25	16	10	25	5	14	25	5	41	25	16	10	25	22	23	25	22	52	25	17	27	25	7	26	24	4	33	25	15	18	25	22	23	24	22	45
26	15	52	26	4	51	26	6	3	26	16	27	26	22	30	26	22	46	26	17	11	26	7	4	25	4	56	26	15	37	26	22	31	25	22	38
27	15	34	27	4	27	27	6	26	27	16	44	27	22	37	27	22	40	27	16	55	27	6	42	26	5	19	27	15	55	26	22	38	26	22	31
28	15	15	28	4	4	28	6	49	28	17	1	28	22	43	28	22	34	28	16	38	28	6	19	27	5	42	28	16	13	27	22	44	27	22	24
29	14	56				29	7	11	29	17	17	29	22	49	29	22	27	29	16	21	29	5	56	28	6	5	29	16	31	28	22	50	28	22	16
30	14	37				30	7	33	30	17	33	30	22	54	30	22	20	30	16	4	30	5	33	28	6	28	30	16	49	30	22	56	30	22	8
31	14	18				31	7	55				31	22	59				31	15	47	31	5	10				31	17	6				31	21	59

The declination of the Sunne for the Leape yeare.

Ianuary.			February			Marche.			Aprill.			Maie.			Iune.			July.			Auguſt.			Septēber			Octōber.			Nouemb.			Decemb.		
Da.	De.	Mi.	Da.	De.	Mi.	Da.	De.	Mi	Da	De.	Mi	Da	De.	Mi.	Da	De	Mi.	Da	De	Mi	Da	De.	Mi.	Da.	De.	Mi.	Da	De.	Mi.	Da.	De.	Mi.	Da	De	Mi.
1	21	50	1	14	2	1	3	23	1	8	32	1	17	55	1	23	7	1	22	7	1	15	16	1	4	30	1	7	8	1	17	35	1	23	5
2	21	40	2	13	42	2	3	0	2	8	54	2	18	14	2	23	11	2	21	59	2	14	58	2	4	7	2	7	31	2	17	51	2	23	10
3	21	30	3	13	22	3	2	37	3	9	16	3	18	34	3	23	14	3	21	50	3	14	40	3	3	44	3	7	54	3	18	7	3	23	14
4	21	20	4	13	2	4	2	13	4	9	38	4	18	44	4	23	17	4	21	41	4	14	22	4	3	21	4	8	16	4	18	23	4	23	17
5	21	9	5	12	42	5	1	50	5	9	59	5	18	58	5	23	20	5	21	32	5	14	3	4	2	58	5	8	38	5	18	35	5	23	20
6	20	58	6	12	21	6	1	27	6	10	20	6	19	12	6	23	22	6	21	22	6	13	44	5	2	35	6	9	0	6	18	54	6	23	22
7	20	47	7	12	0	7	1	4	7	10	41	7	19	25	7	23	24	7	21	12	7	13	25	6	2	12	7	9	22	7	19	9	7	23	24
8	20	35	8	11	39	8	0	40	8	11	2	8	19	38	8	23	25	8	21	2	8	13	6	7	1	48	8	9	44	8	19	23	8	23	25
9	20	23	9	11	18	9	0	16	9	11	23	9	19	51	9	23	26	9	20	52	9	12	46	8	1	25	9	10	6	9	19	37	9	23	26
10	20	10	10	10	57	10	0	8	✠ 10	11	43	10	20	4	10	23	27	10	20	41	10	12	26	9	1	2	10	10	28	10	19	51	10	23	27
11	19	57	11	10	35	11	0	32	11	12	3	11	20	16	11	23	28	11	20	30	11	12	6	10	0	39	11	10	50	11	20	4	11	23	28
12	19	44	12	10	13	12	0	56	12	12	23	12	20	28	12	23	28	12	20	18	12	11	46	11	0	15	12	11	12	12	20	17	12	23	27
13	19	30	13	9	51	13	1	20	13	12	43	13	20	39	13	23	27	13	20	11	13	11	26	12	0	9	✠ 13	11	33	13	20	30	13	23	26
14	19	15	14	9	29	14	1	40	14	13	3	14	20	50	14	23	26	14	19	53	14	11	6	13	0	33	14	11	54	14	20	42	14	23	25
15	19	0	15	9	7	15	2	7	15	13	22	15	21	1	15	23	25	15	19	40	15	10	45	14	0	57	15	12	15	15	20	54	15	23	23
16	18	45	16	8	45	16	2	30	16	13	41	16	21	11	16	23	23	16	19	27	16	10	24	15	1	21	16	12	36	16	21	5	16	23	21
17	18	29	17	8	33	17	2	53	17	14	0	17	21	21	17	23	21	17	19	13	17	10	3	16	1	44	17	12	56	17	21	16	17	23	18
18	18	13	18	8	0	18	3	16	18	14	19	18	21	31	18	23	18	18	18	59	18	9	42	17	2	7	18	13	16	18	21	27	18	23	15
19	17	57	19	7	37	19	3	39	19	14	38	19	21	41	19	23	15	19	18	45	19	9	21	18	2	30	19	13	36	19	21	37	19	23	12
20	17	41	20	7	14	20	4	3	20	14	56	20	21	50	20	23	11	20	18	31	20	8	59	19	2	53	20	13	56	20	21	47	20	23	8
21	17	42	21	6	51	21	4	26	21	15	14	21	21	59	21	23	7	21	18	16	21	8	37	20	3	17	21	14	16	21	21	56	21	23	4
22	17	7	22	6	28	22	4	49	22	15	32	22	22	8	22	23	3	22	18	1	22	8	15	21	3	41	22	14	35	22	22	5	22	23	59
23	16	50	23	5	5	23	5	12	23	15	49	23	22	16	23	22	58	23	17	46	23	7	53	22	4	4	23	14	54	23	22	13	23	22	53
24	16	32	24	5	42	24	5	35	24	16	6	24	22	23	24	22	53	24	17	30	24	7	31	23	4	27	24	15	13	24	22	21	24	22	47
25	16	14	25	5	19	25	5	38	25	16	23	25	22	30	25	22	48	25	17	14	25	7	9	24	4	50	25	15	32	25	22	29	25	22	40
26	15	56	26	4	56	26	6	20	26	16	40	26	22	36	26	22	42	26	16	58	26	6	46	25	5	13	26	15	50	26	22	26	26	22	33
27	15	38	27	4	33	27	6	42	27	16	56	27	22	42	27	22	36	27	16	42	27	6	24	26	5	36	27	16	8	27	22	43	27	22	26
28	15	19	28	4	10	28	7	4	28	17	12	28	22	48	28	22	29	28	16	26	28	6	2	27	5	59	28	16	26	28	22	49	28	22	18
29	15	0	29	3	46	29	7	26	29	17	28	29	22	53	29	22	22	29	16	8	29	5	39	28	6	22	29	16	44	29	22	55	29	22	10
30	14	41				30	7	48	30	17	44	30	22	58	30	22	15	30	15	41	30	5	16	29	6	45	30	17	1	30	23	0	30	22	1
31	14	22				31	8	10				31	22	3				31	15	34	31	4	53				31	17	18				31	21	52

TO FINDE OVT THE NEVV MOONE, AND THE AGE OF THE MOONE

at any time, according to the auncient computation, without *eyther Calender or Ephemerides.*

FIrst you must learne perfectly by the former Tables the Golden number and the Epact of that yeere, and their difference. But know this, that the Golden number allwayes beginneth in the Calendes of January, and euery yeere increaseth one vntill the circle of the Moone be ended, which then returneth to 1. 2. 3. But the Epact beginneth in the Calendes of March, and increaseth euery yeere 11. and endeth at 30. ¶ Wherefore when it exceedeth 30. by casting away the Whole circle, the remainder is the Epact, to which euery yeere is added 11. as is aforesayd.

Now if you will know what day of euery moneth the new Moone doth happen: take the number of the Epact of the present yeare: and adde therevnto the number of the moneths past from the beginning of March, reckoning also the moneth present. And if these numbers beeing added together amount not aboue 30. then almuch as you want of 30. is the day of the new Moone of that moneth.

But if you looke for the age of the Moone, adde the dayes that are past of the moneth present to the Epact, and the moneths since March: and the number remaining after the substraction of 30. declareth the age of the Moone. But if, being added together, it be vnder 30. that selfe same telleth how olde the Moone is. But you may perceaue these things more plainly by examples.

The example of the first.

I would know the new Moone of the moneth of June, Anno 1588. The Epact of this yeere is 12. Wherevnto I adde 4. for the 4. moneths, beginning at March, which beeing put together make 16. Now this number is lesse then 30. and therefore I substract 16. from 30. and there remaineth 14. so that the new Moone was the 14. of June.

The other example.

I demaund how olde the Moone shall be the 24. of August of this same yeere 1588. The Epact is 12. to it I adde 6. for the moneths past: they make 18. Wherevnto I adde 24. the number of the dayes of August, and then haue I 42. Which exceedeth 30. by 12. which sheweth the age of the Moone: and therefore the 24. of August the Moone shall be 12. dayes old.

If you will find the Epact without any booke begin to recken 10. at the lowest ioynt of your thombe, at the other 20. at the third and last 30. Which done, count the Golden number vpon the ioynts of your thombe, reckoning from the lowest to the highest, vntill you come to the end of it. And if your account shall ende on the lowest ioynt of your thombe where I haue set 10. adde ten to the Golden number, which beeing both put together doe make the Epact for that yeere. But if the reckoning shall end vpon the second ioynt, adde 20. to the Golden number, and both the numbers together doe shew the Epact. But if it end on the third, the Golden number and the Epact shall be one. As for example.

The question is what the Epact is Anno 1588. the Golden number is 12. Which in numbering endeth on the third ioynt where stand 30. which being added make 42. of which 30. being cast away the remaynder is the Epact: which beginneth alwaies the first of March: as the Golden number doth the first of January.

OF

OF THE FIXED STARRES AND THEIR VSE.

FIrst it is necessary for you to know that the obliquitie or declination of the fixed starres is of two sortes: to wit, Northward and Southward, which in the Catalogue of the fixed starres are marked with these letters, N, and S.

If you will seeke the height of the Pole in any place by the helpe of any fixed starre set downe in the Table following, take her Meridian altitude by the quadrant or Crosse staffe. Then by the Table following seeke out her North or South declination, which you must adde to the altitude, if the declination be southerly, or substract it, if it be northerly, and it will shew you the altitude of the Aequator: which beeing deducted from 90, expresseth the height of the Pole. As you shall perceiue more plainely by familiar example. In the yeere 1583. on the 10. day of January about fiue a clocke in the morning Wagener tooke at Enchuysen the Meridian altitude of Spica virginis with the Crosse staffe, in 28. degrees and 15. minutes. The Table sheweth that her Southward declination is 8. degrees and 55. minutes, which being added to the Meridian altitude, declareth the Aequator to be 37. degrees, and 10. minutes high: which being substracted from 90. there remayneth 52. degrees and 50. minutes, which is the altitude of the Pole for Enchuysen.

Another example is, that the 11. day of January in the same yeere about 8. of the clocke towardes the euening, Wagener tooke the Meridian altitude of Palilicium, or Oculus Tauri of 53. degrees, and 4. minuts. The Table teacheth that his Northward declination is of 15. degrees, and 54. minutes, which you must take from the altitude, because it is Northward, and leaue 37. degrees, 10. minutes, for the altitude of the Aequator, when you haue substracted these numbers from 90. that which remayneth being 52. degrees, and 50. minutes, is the height of the Pole, as aforesaid.

If you will learne the true houre of the night by the fixed starres, marke well some one of the fixed starres which you know, standing in the South: then looke for the same in the Table, and take the houres and minutes from the declination. And seeke also for the day of the yeere in the next Table to the Catalogue, and substract the houres and minutes which you finde there, from the houres and minutes which are allotted to the starre: and that which remayneth signifieth the houres and minutes of the midday last past. But if it shall happen that the starre shall haue lesse houres and minutes then a naturall day hath, then adde 24. houres to those of the starre, and substract, as aforesaid.

It will appeare more plainely by this example. Wee haue before marked Spica virginis vppon the 10. of January, and therefore must we seeke out the houre of his obseruation. In the Catalogue right against this starre, are 13. houres, and 3. minutes, and in the Table of the dayes the 10. day of January hath 20. houres, and 10. minutes. Wherefore we adde 24. houres to the houres of the starre, and they make together 37. houres, and 3. minutes. Substract from hence 20. houres, and 10. minutes, and there remaine 16. houres, and 53. minutes, which are the houres from the last midday. And therefore the obseruation was made at 4. a clocke, 53. minutes in the morning, or after midnight.

An other example is. Wagenar saw the 11. day of January aforesaid Palilicium, or Oculus Tauri. In the Catalogue you shall finde hard by the starre 4. houres 12. minutes. Likewise the Table of the dayes about the 11. day of January, giueth you 20. houres, 14. minutes. And because the houres of the starre are fewer then those of the day, he added 24. houres, which being put together make 28. and 12. minutes. Hee substracted from them 20. houres, 14. minutes, and there remayned 7. houres, and 58. minutes. And therefore the time to marke the starre was at 7. a clocke, and 58. minutes in the afternoone.

I will also shew a third example. The 17. of March, Anno Domini 1583. Wagenar tooke the Meridian altitude of the starre called Rostrum Corui, that is, the Rauens byll: the houre thereof hee gathered after this manner. In the Catalogue where this starre is mentioned, you haue 11. houres, 48. minutes. In the Table of the dayes you finde 17. dayes of March, houres 0. minutes 24. which beeing deducted from the houres of the starre, are 11. houres, and 24. minutes remayning. Wherefore this obseruation was taken the 11. houre 24. minutes after midday. And so proceed with other fixed starres.

The Dodecatemories in the Zodiacke, are partly Northerly, and partly Southerly. The North signes are, Aries, Taurus, Gemini, Cancer, Leo, Virgo, for the Summer season: the Southerne, are, Libra, Scorpius, Sagittarius, Capricornus, Aquarius, Pisces, which are the signes for the Winter. To euery seuerall signe are appoynted particular moneths: March, Aprill, May, Iune, Iuly, August, are assigned for the Summer, and September, October, Nouember, December, Ianuary, February for the Winter.

A CATALOGVE OF THE MORE FAMOVS FIXED STARRES, WITH THEIR LONGITVDE, DECLINATION, RIGHT ASCENSION CONVERTED INTO HOWERS, AND MAGNITVDE, RECTIFIED TO THE BEGINNING OF THE YEERE, 1588.

		Longitude.		Declin.			Right as.		Mag.
		Deg.	Min.	Deg.	Min.		Ho.	Min.	
✶	Cornu Arietis precedens. **The Rams horne.**	♈ 7	58	17	35	N	1	33	3
✶	Dexter humerus Cephei. Cepheus **right shoulder.**	♈ 7	58	61	11	N	21	10	3
✶	**The vtmost of** Eridanus.	♈ 21	28	40	36	N	2	53	1
✶	Scheder. Andromedas **shoulder blade.**	♈ 16	38	28	57	N	0	19	3
✶	Mirach. Andromedas **girdle.**	♈ 25	8	33	57	N	0	48	3
✶	Pegasus **wing or shoulder.**	♈ 3	28	12	49	N	23	52	2
✶	Pegasus **legge.** Caput Andromedæ.	♈ 9	8	27	19	N	23	49	2
✶	**The Whales belly.**	♈ 16	18	12	3	S	1	31	3
✶	**The Whales necke.**	♈ 28	58	7	13	N	1	54	4
✶	**The Whales brest.**	♈ 23	18	13	43	S	2	3	3
✶	Menkar. **The Whales snowt.**	♉ 8	58	2	47	N	2	42	3
✶	Schedar. Cassiopeas **brest.**	♉ 2	8	54	24	N	0	17	3
✶	Cassiopeas **chayre.**	♉ 7	58	58	32	N	0	31	3
✶	Algenib, Perseus **right side.**	♉ 16	8	48	9	N	2	55	3
✶	Rasalgol. Medusaes **head.**	♉ 20	58	40	1	N	2	43	2
✶	**The first and Northermost of the** Pleiades.	♉ 23	28	23	1	N	3	19	5
✶	**The hinder Southermost of the** Pleiades.	♉ 23	48	23	16	N	3	20	5
✶	**The vtmost of the** Pleiades.	♉ 24	58	24	12	N	3	25	5
✶	Trapezium, **The least of the** Pleiades.	♉ 23	58	23	43	N	3	21	5
✶	Succule. **The first of the** Hyades.	♉ 29	58	14	33	N	3	56	3
✶	Aldebaran. Palilicium. **The Buls eye.**	♊ 3	58	15	54	N	4	12	1
✶	Bedelgeuse, Orions **right shoulder.**	♊ 23	18	6	19	N	5	34	1
✶	Elgeuse. Bellatrix. Orions **left shoulder.**	♊ 15	18	5	15	N	5	4	2
✶	Rigel. Orions **left foote.**	♊ 11	38	9	10	S	4	53	1
✶	**The first of** Orions **girdle.**	♊ 16	38	1	16	S	5	11	2
✶	**The middlemost of the belt.**	♊ 18	38	1	46	S	5	19	2
✶	**The last of** Orions **girdle.**	♊ 20	38	2	18	S	5	26	2
✶	**The Wainmans right shoulder.**	♊ 24	8	43	19	N	5	30	2
✶	Alhaiot. **His left shoulder. The goate.**	♊ 16	18	45	7	N	4	48	1
✶	Alrucaba. **The North Pole starre.**	♊ 21	28	86	31	N	0	21	3
✶	Canopus. **The South starre.**	♋ 8	28	51	38	S	6	14	1
✶	Alhabor. Syrius. **The great Dogge.**	♋ 8	58	15	55	S	6	29	1
✶	Algomeisa. Procyon. **The lesser Dogge.**	♋ 20	28	5	52	N	7	20	1
✶	Rasalgeuse, Geminies **head.**	♋ 14	38	32	16	N	7	8	2
✶	Hercules. **The other Twins head.**	♋ 17	58	28	28	N	7	21	2
✶	**The Souther guarde.**	♌ 8	28	75	35	N	14	0	2
✶	**The Norther guarde.**	♌ 17	28	72	54	N	14	43	2
✶	Alphard. **The cleerest of the Snake.**	♌ 21	18	5	3	S	9	9	2
✶	Pectus Cancri. **The Maunger.**	♌ 1	38	20	29	N	8	16	Neb.
✶	Dubhe. **The great Beares shoulder.**	♌ 11	58	62	27	N	10	46	2
✶	**The great Beares nauill.**	♌ 13	28	58	7	N	10	33	2
✶	**The great Beares tayle.**	♌ 24	23	59	9	N	11	46	3
✶	**The great Beares left hinder legge.**	♌ 25	18	55	14	N	11	31	2
✶	Calb eleced. Basiliscus. **The Lyons heart.**	♌ 23	48	13	46	N	9	45	1
✶	**The Lyons necke.**	♌ 23	28	21	43	N	9	55	2
✶	**The Lyons loynes.**	♍ 5	28	22	11	N	10	51	2
✶	Alioth. **The first of the great Beares tayle.**	♍ 3	28	57	29	N	12	33	2
✶	**The middlemost of his tayle.**	♍ 9	18	56	49	N	13	1	2
✶	Elkerd bennenaz. **The last of the Beares taile.**	♍ 21	8	51	6	N	13	29	2
✶	**The vtmost of the Virgins winge.**	♍ 20	18	9	22	N	11	34	3
✶	Deneb eleced. **The Lyons tayle.**	♍ 15	48	16	29	N	11	27	1

	Longitude.		Declin.			Right as.		Mag
	Deg.	Min.	Deg	Min		Ho.	Min.	
✶ Fundus Crateris. Crater. **The Cupps bottome.**	♍ 17	38	16	15	S	10	38	4
✶ Præuindemiatrix. **The Vintager.**	♎ 3	28	12	31	N	12	37	2
✶ Spica virginis: Azimech. **The Virgins Spike.**	♎ 17	58	8	53	S	13	3	1
✶ Humerus sinister Bootis: Ceginus, Bootes **left shoulder.**	♎ 10	58	39	59	N	14	11	3
✶ Arcturus: Alramech. **The stoune starre.**	♎ 18	18	21	53	N	13	57	1
✶ Rostrum Corui. **The Rauens bill.**	♎ 6	38	22	16	S	11	49	3
✶ Ala dextra Corui, **The Rauens right winge.**	♎ 8	48	17	5	S	12	8	3
✶ Pes dexter prior Centauri. Centaurus **right foote afore.**	♎ 29	38	48	46	S	12	28	1
✶ Lucida Coronæ: Alpheta. Ariadnes **crowne.**	♏ 5	58	28	26	N	15	16	2
✶ Laux Australis. **The** Souther Scole **of the ballance.**	♏ 9	18	13	58	S	14	28	2
✶ Laux Borealis. **The** Norther Scole.	♏ 13	28	7	45	S	14	54	2
✶ In frõte scorpij Borealior. **The** Northermost **in** Scorp. **front.**	♏ 27	38	18	21	S	15	43	3
✶ Media. **The midst in his front.**	♏ 26	58	21	7	S	15	37	3
✶ Australior in fronte scorpij. **The** Southermost **in his front.**	♏ 26	58	24	22	S	15	33	3
✶ Palma sinistra Ophiuchi siue serpentarij Yed. Oph. **left hand.**	♏ 26	18	2	46	S	15	52	3
✶ Cor scorpij: Antares. Scorpions **heart.** Calb alatrab.	♐ 3	58	24	55	S	16	4	2
✶ Caput Herculis: Ras-algeti. Hercules **his head.**	♐ 8	38	15	24	N	16	51	3
✶ Caput Ophiuchi. Ophiuchus **his head.**	♐ 16	8	13	6	N	17	14	3
✶ Caput Draconis: Ras-Aben. **The** Dragons **head.**	♐ 20	58	52	9	N	17	45	3
✶ Lucyda Lyrę: Vuega: Vultur cadens. **The** Lyrę.	♑ 8	38	38	41	N	18	21	1
✶ Aquila: Vultur volans: Alkair. **The** Eagle.	♑ 25	8	7	36	N	19	27	2
✶ In suffragine sinistra priori sagittarij. Sagittaries **fore bolds.**	♑ 8	58	46	6	S	18	48	2
✶ In genu eiusdem cruris. Sagittaries **knee.**	♑ 8	18	41	10	S	18	42	2
✶ Rostrum Cygni, Oloris, siue Gallinæ. **The Swans bill.**	♑ 25	48	27	31	N	19	15	3
✶ Pectus Cygni, siue Oloris. **The Swannes brest.**	♒ 19	48	38	23	N	20	11	3
✶ In ancone dexteræ Alæ. **The Swannes right winge.**	♒ 10	38	44	24	N	19	28	3
✶ In ancone sinistrę Alę. **The Swannes left winge.**	♒ 22	8	32	36	N	20	30	3
✶ In extremo eiusdem Alę. **The Swannes left Pinion.**	♒ 27	58	55	26	N	19.	37	3
✶ Lucens in Cauda Delphini. **The Dolphins tayle.**	♒ 8	58	10	10	N	20	16	3
✶ Rhomboidis Delphini Australior. **The south Dolph. star.**	♒ 9	48	13	6	N	20	15	3
✶ Eiusdem Borealior. **The North Dolphin starre.**	♒ 11	28	15	14	N	20	19	3
✶ Caudę Capricorni: **The former of** Capricorns **tayle.**	♒ 16	38	17	56	S	21	19	3
✶ Sequens in Cauda. **The next in** Capricorns **tayle.**	♒ 17	38	17	28	S	21	23	3
✶ Cuspis Sagittę. **The Arrow head.**	♒ 1	28	18	34	N	19	40	4
✶ Muscida Pegasi: Alpheratz. Pegasus **nostrils.**	♒ 26	38	7	36	N	21	27	2
✶ Vitima fusionis aquę: Formahand. **The end of** Aquarius **streme.**	♒ 28	18	33	27	S	22	39	1
✶ Cauda Cygni: Denebadige. **The Swannes tayle.**	♓ 0	28	44	7	N	20	25	2
✶ Crus Pegasi: scheat Alpheratz. Pegasus **hough.**	♓ 23	28	25	42	N	22	44	2
✶ Humerus, siue Ala Pegasi. Markab Alpheratz. Pegasus **wing.**	♓ 17	58	13	20	N	22	45	2
✶ Lucens in capite Pegasi. Pegasus **head.**	♓ 0	38	4	32	N	21	47	3
✶ Cauda Ceti: Denebkaytos. **The Whales tayle.**	♓ 26	58	19	48	S	0	23	3
✶ Crus Aquarij: Scheat. Aquarius **thigh.**	♓ 2	58	17	22	S	22	31	3

A TABLE OF THE SONNES
RIGHT ASCENSIONS, FITTED
INTO HOVRES EQVALL AND
minutes, to find out all the houres of night
by the Starres.

Day.	January.		Februar.		March.		April.		Maie.		Iune.		July.		August.		Septeb.		Octob.		Nouemb.		Decemb.	
	Ho.	Min.	Ho.	Min.	Ho.	Min.	Ho.	Min	Ho.	Min.	Ho.	Min.	Ho.	Min	Ho.	Min.	Ho.	Min.	Ho.	Min.	Ho.	Min.	Ho.	Min.
1	19	33	21	41	23	27	1	20	3	12	5	16	7	20	9	22	11	16	13	5	15	5	17	14
2	19	37	21	45	23	31	1	23	3	16	5	20	7	24	9	26	11	20	13	8	15	10	17	18
3	19	41	21	48	23	35	1	27	3	20	5	25	7	28	9	29	11	24	13	12	15	14	17	22
4	19	45	21	52	23	38	1	30	3	23	5	29	7	32	9	33	11	27	13	16	15	18	17	27
5	19	50	21	56	23	42	1	34	3	27	5	33	7	36	9	37	11	31	13	20	15	22	17	31
6	19	54	22	0	23	46	1	38	3	31	5	37	7	40	9	41	11	34	13	23	15	27	17	36
7	19	58	22	4	23	49	1	41	3	35	5	41	7	44	9	45	11	38	13	27	15	31	17	40
8	20	2	22	8	23	53	1	45	3	39	5	45	7	48	9	48	11	42	13	31	15	35	17	45
9	20	6	22	12	23	56	1	49	3	43	5	49	7	52	9	52	11	45	13	35	15	39	17	49
10	20	10	22	16	0	0	1	52	3	47	5	54	7	56	9	56	11	49	13	39	15	45	17	54
11	20	14	22	20	0	3	1	56	3	51	5	58	8	0	10	0	11	53	13	42	15	47	17	58
12	20	19	22	24	0	7	2	0	3	55	6	2	8	4	10	3	11	57	13	46	15	52	18	3
13	20	23	22	28	0	10	2	3	3	59	6	6	8	8	10	7	12	0	13	50	15	56	18	7
14	20	27	22	32	0	14	2	7	4	3	6	10	8	12	10	11	12	4	13	54	16	0	18	12
15	20	32	22	35	0	17	2	11	4	7	6	14	8	16	10	14	12	7	13	58	16	4	18	16
16	20	36	22	39	0	21	2	15	4	11	6	18	8	20	10	18	12	11	14	2	16	8	18	21
17	20	40	22	43	0	24	2	19	4	15	6	23	8	24	10	21	12	14	14	6	16	13	18	25
18	20	45	22	46	0	28	2	22	4	19	6	27	8	28	10	25	12	18	14	9	16	17	18	30
19	20	49	22	50	0	32	2	26	4	23	6	31	8	32	10	29	12	21	14	13	16	21	18	34
20	20	53	22	54	0	36	2	30	4	27	6	35	8	36	10	33	12	25	14	17	16	25	18	39
21	20	57	22	58	0	39	2	34	4	31	6	39	8	40	10	36	12	28	14	21	16	30	18	43
22	21	1	23	1	0	43	2	38	4	35	6	43	8	44	10	40	12	32	14	25	16	34	18	48
23	21	5	23	5	0	47	2	41	4	40	6	47	8	47	10	43	12	35	14	29	16	38	18	52
24	21	9	23	9	0	50	2	45	4	44	6	51	8	51	10	47	12	39	14	33	16	43	18	57
25	21	13	23	12	0	54	2	49	4	48	6	56	8	55	10	51	12	43	14	37	16	47	19	1
26	21	17	23	16	0	57	2	53	4	52	7	0	8	59	10	54	12	46	14	41	16	50	19	6
27	21	21	23	20	1	1	2	57	4	56	7	4	9	3	10	58	12	50	14	45	16	56	19	10
28	21	25	23	23	1	5	3	1	5	0	7	8	9	7	11	1	12	54	14	49	17	0	19	15
29	21	29			1	8	3	4	5	4	7	12	9	10	11	5	12	57	14	53	17	5	19	19
30	21	33			1	12	3	8	5	8	7	16	9	14	11	9	13	1	14	57	17	9	19	24
31	21	37			1	16			5	12			9	18	11	13			15	1			19	28

CERTEINE FIXED STARRES, WHICH
best fit the Crosse staffe, calculated as touching their
declination for the beginning of the yeare, 1586.

			Mag.	Declin. deg.	Mi.		
✶	This fixed starre is euer in the Meridian when the Guards are aloft in the South-east part of the heauen.	Alhabor, or great Dogge. The South starre.	1	15.	55	S	The Harueſt starre.
✶	This is in the Meridian, when the former starres are in the East part of heauen.	Alphard. The brightest of Hydra.	3	5.	3	S	The Winter starre.
✶	This is in the Meridian, when the Guards are North and by East.	Azimech. The Virgins spike.	1	8.	53	S	A Winter starre.
✶	This is in the Meridian, when the Guards are in the North-west.	Antares. The Scorpions heart.	2	26.	27	S	The Spring starre.
✶	This is in the Meridian, when the Guards are in the West and by North.	The brightest in Sagittaries brest.	3	26.	27	S	A Summer starre.
✶	This is in the Meridian, when the Guards are in the South-west.	Deneb kaytos. The Whales tayle.	3	19.	48	S	A Summer starre.

THE

THE VVAY TO FINDE OVT
THE HEIGHT OF THE POLE BY THE *STARRES WHICH ARE WITHIN* the Tropicks declining from the *Aequator*.

FIrst you haue the South ſtar called *Alhabor*, or the great dog, which declineth from the Aequator 15. deg. 55. min. to the Southwardes. Take his diſtance from the Zenith, and ſubſtract from it the degrees and minuts of the declination, becauſe it is Southerly, the remainder ſhelweth the height of the Pole. But if the Poles height muſt be ſought for by Orions right ſhoulder: add to his diſtance from the Zenith, 6. deg. 19. minutes of the declination, becauſe it is Northward, and you ſhall finde that you ſeeke for.

But if you will finde it out by Orions left foote: ſubſtract from the diſtaunce thereof to the Zenith 9. degrees. 10. minutes of the declination, becauſe it is Southward: the reſt, ſhelweth the height of the Pole. And in like maner ſhall you proceede by the firſt of Orions girdle. For ſubſtracting from the diſtaunce thereof to the Zenith, one degree, 16. minutes of Southerne declination, the reſidue is the Poles height. So may you doe with all the ſtarres which are within the Tropicks, declining from the Aequator: ſo that their declinations both Southerne and Northerne in the uſt degrees and minutes, be firſt knowne vnto you. For if the declination be Southward, it muſt be ſubducted from the Zenithes diſtance: but if Northward, added: and then the Whole ſome, or the remainder will demonſtrate the height of the Pole. The meridian height of the Starre is taken by the croſſe ſtaffe, or other fit inſtrumentes, and being deducted from 90. degrees, ſhelweth you the diſtance from the zenith.

The Poles height may alſo be found, by the ſtarres, which turne about the Pole within the Arcticke circle, and euery 24. houres paſſe the meridian twiſe, vnder and ouer the Pole: ſo that you may take them twiſe in one day, if occaſion ſerue: for example. The middle ſtarre of the Guardes in Vrſa minor, declineth from the Aequinoctiall, 75. degrees, 40. minutes: diſtant from the Pole both aboue and vnder, 14. degrees 20. minutes. Take his meridian height, and adde to it the degrees of the Poles diſtance, if it be aboue: or ſubſtract it, if it be vnder: the ſumme or the remainder Wil ſhelw the eleuation. The ſame way muſt you worke by the ſtars of Vrſa maior (Which are more in number) ſo that you certainly know their diſtances from the Pole, being vnder or aboue by adding (as is ſayd) the degrees of the diſtance, to the Altitude which you finde, if it be aboue the Pole, or ſubtracting, if it be vnder.

So may you worke with the reſt of the ſtarres, which can be ſeene and applied to vſe by Naugatours.

A DECLARATION OF THIS

instrument which followeth.

IN the compasse and borders of the vttermost circle, there is set down the circulare course of the Guardes in Vrsa Minor, as they turne in al the 8. points of the instrument or compasse about the North starre: Which haue also certeine numbers assigned both to be added and substracted, so that when the said starres come in any of those pointes, you must adde or substract the number which is there marked. You must also know, that all the stars do passe the meridian: but euery one in a seuerall declination from the Aequator.

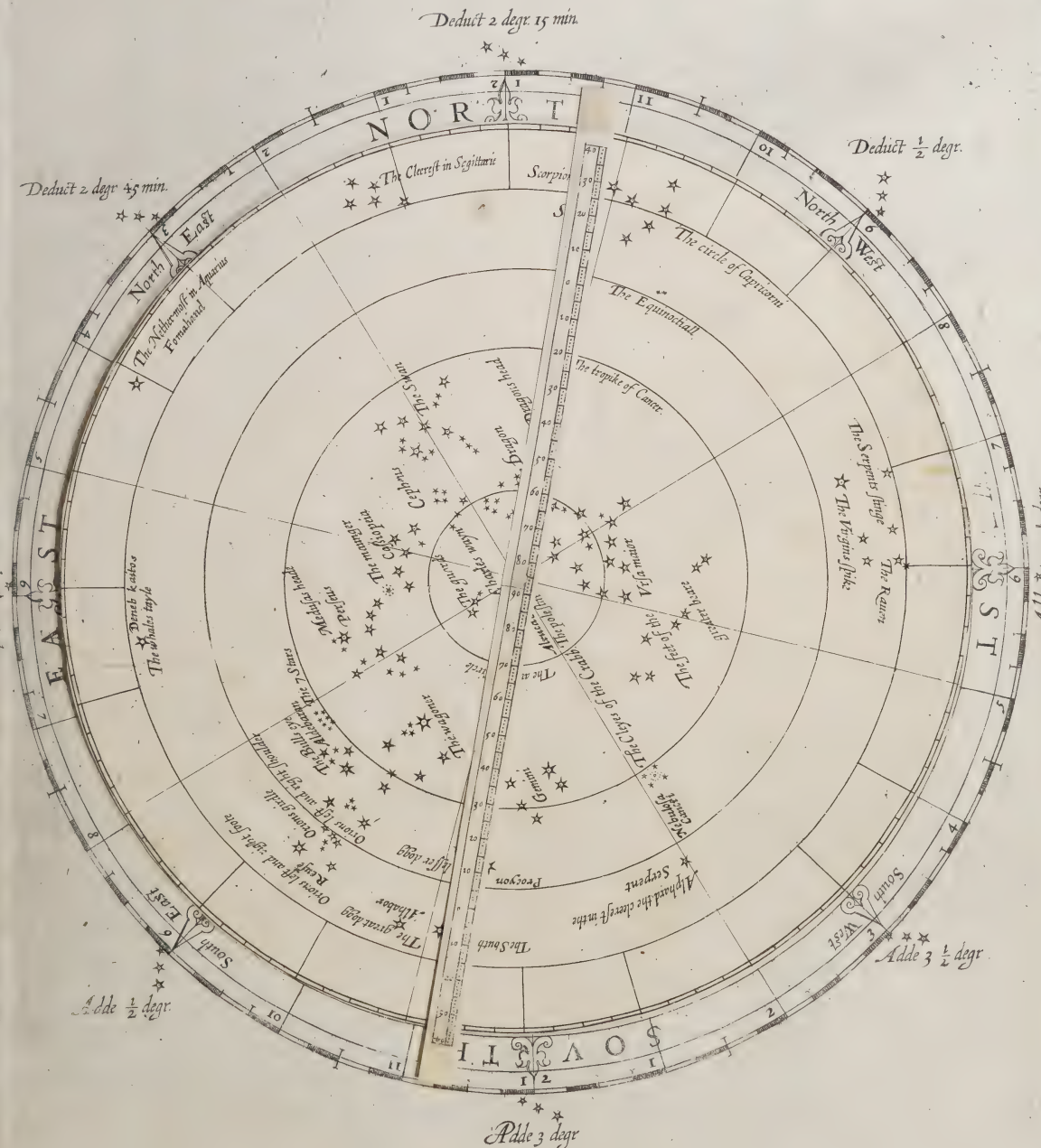
The other compasse or circle, which moueth, hath the chiefest of those starres which enuiron the Pole, or are caried round within the Tropikes of Cancer and Capricorne. The Northerne stars serue to finde out without difficultie the houres of the night at any time of ỹ yere, especially the Guardes in Vrsa Minor: Which on the 30. day of Aprill at midnight stand North, aboue the Pole, and then is it 12. a clocke at after midnoone. And after 15. dayes, the said stars remaine in the same place, at eleuen a clock at night, and at the ende of May, at ten a clock: so that in euery 24. houres: by 4. minutes of an houre they preuent the same place, and in euery 15. dayes, one houre sooner, they become North aboue the pole: Which if any man do rightly mark, he may easely find out ỹ houre of ỹ night at any time.

But if you will fitly apply to this purpose of the South starres, the greatest part whereof do moue within the Tropikes of Cancer and Capricorn: you shal turne about the vppermost round circle or the moueable wheele, wherein the Guardes of Vrsa minor are purtraied: & taking ỹ same point in this circle, you shal set it right vpon the Southeast poynt of the compasse, where you shal beginne: Then the Southerne starre which is called Canis Maior, and Alhabor will stand in the Meridian about 16. degrees from the Aequator. Three houres after when the said stars are in the East point, Lucida hydræ which is also called Alphard, standeth in the Meridian: and right aboue it is placed the Maunger or Nebulosa Cancri. But when the same stars are North northeast and North & by East, then Spica virginis standeth in the Meridian: and about 4. houres after, when those Guardes or Watchers of Vrsa minor being mounted higher, possesse the N. W. region of the firmament: Cor Scorpii standeth in the Meridian, declining from the Aequator almost 25. degrees. But when the sayd stars beare West and by North, then Lucida Sagittarii keepeth the Meridian, but when you haue brought it West SouthWest, Fomahand keepeth the meridian. Both the latter starres haue a great declination from the Aequator then the rest: for the one beareth to the SouthWard 26. degrees & 27. minutes: and the other 33. degrees, and 27. minutes. Now if the said Watch stars stand South southWest, then the V Vhales Tayle keepeth the meridian, declining, 19. degrees 48. minutes SouthWard from the Aequator. But if the said starres be South and by East, and South southeast. The Buls eie, and Orion shal possesse the midnoone stead. After an houre and halfe the great Dogge returneth again to the meridian. All these rehearsed starres, do most of all agree and serue fitly for the obseruation of Nauigators, which are made with the crosse staffe, or other instruments. Two or three of these may be cut in the transuersarie of your staffe which must be long or short, according as the declination of the starre is Southerly. For that which hath a greater declining from the Aequinoctial, requireth a shorter crosse or transuersarie, Which beneath in the making of the sea crosse staffe, is more largely delared.

Yet We would haue the reader admonished, that the Guards or Watchers are placed in this Instrumene exactly opposite to their due place: leauing neuertheless the two greater starres of those Guards, in their owne place betweene the Pole starre and the Dragons tayle: that thereby may be knowne, what starres are in the meridian, When the Guardes, are in those points. But let the vpper part of the booke, Which representeth the North, be turned to the South, and yet in such sort, that the East poynt, may be right EastWard. For so shall these stars stand in order. AfterWardes the booke may be turned and tossed at pleasure, so that heede be taken, that you misse not in the point of the compasse.

THE

AN INSTRVMENT VRANICALL
OR MOVEABLE COMPASS FOR THE STARRES



OF

OF THE MAKING AL

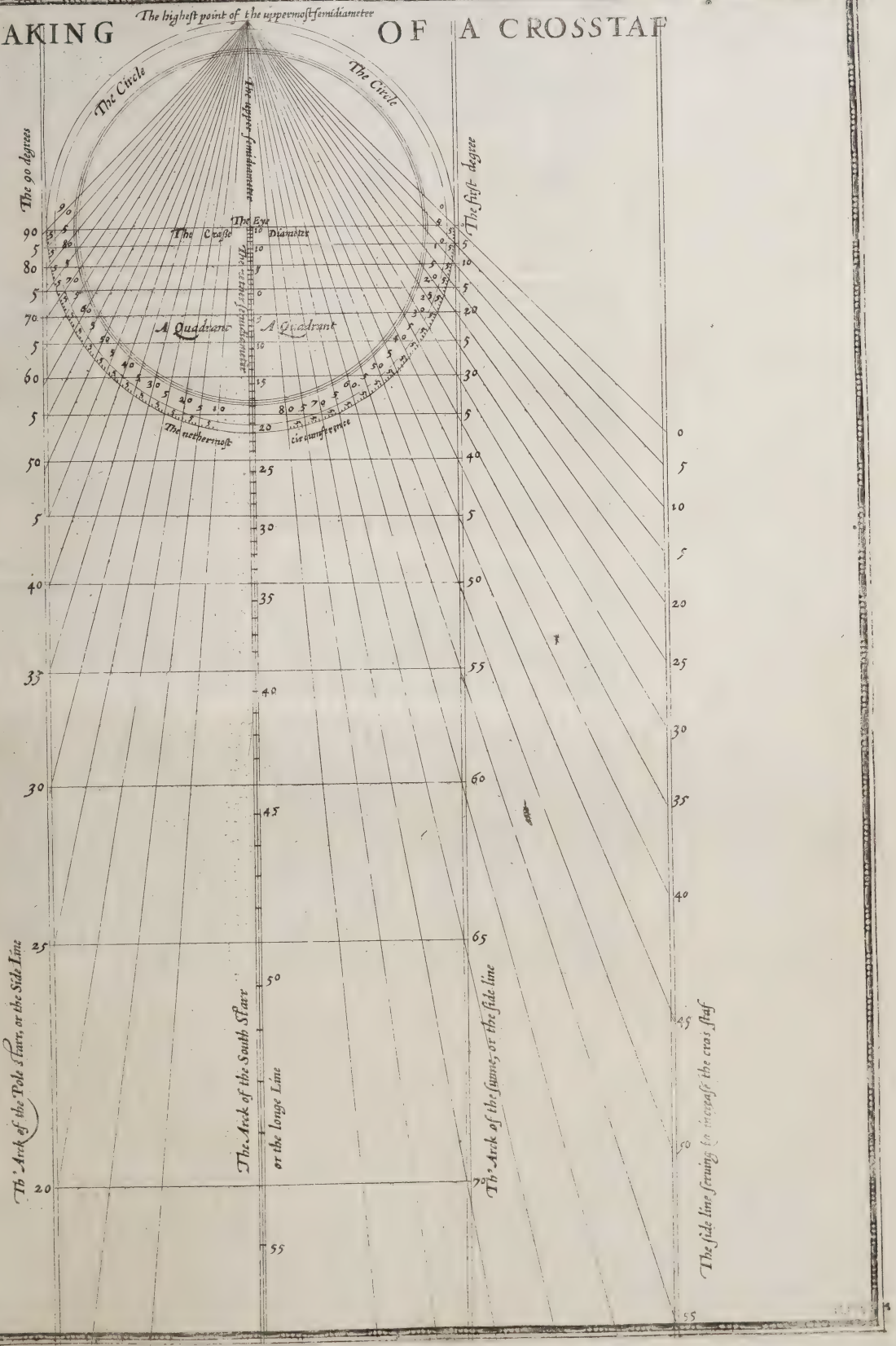
maner of the Sea crosse starres.

TO make a crosse staffe, first you must draw a circle with your compasse, and diuide it with two diameters into foure quadrants, of which the nethermost must be parted into 9. euen portions: and euery one of them subdiuided into ten euen parts: of which ech againe must be diuided into two equall sections, which by imagination are to be diuided into fiue partes, so that ech quadrant thus disparted by fiue, shall conteine 90. partes. This done, draw forth at length your nethermost halfe diameter, which representeth the staffe. And then on eche side of the circle, to the vtmost border draw two right lines, of euen distance and length with the line of your staffe. Then from the highest poynt of the vppermost halfediameter, draw seuerall lines, by the seuerall partitions of the inferiour quadrants, vnto the border of the vtmost lines, according to the length of your staffe: as is here euidently taught in this present patterne. These thinges finished: you shall make your transuersarie or crosse, according to the length of the whole diameter: but so that the midst of it, touch the marckes of the first degrees of the staffe. And if any man will make a longer transuersarie: hee must remoue the lines, which are on eyther side of the circle, so farre off from the circle, as he would lengthen his Crosse: And then, as before, draw the lines of degrees from the top of the vpper halfe diameter, to the inmost verge of the vtter lines. The length of the crosse shall alwayes be such, that it may reach from 30. to 60. degrees, but so that these degrees may be discerned, at both ends of it.

The making of a crosse staffe, seruing for diuers South starres.

FIrst you must obserue by the Guardes, what starres are in the meridian: for example. The great dogge, which is also called the South starre, declining neere 16. degrees from the Aequator: from which you must begun to number: but so that the midst of your crosse, and the nether part of your staffe: conteine exactly 16. degrees which, there beginning to recken, shal end descending to the Aequator: from whence againe ascending: the numbers are ingrauen to the staues end, as the Patterne following setteth cleerely before your eyes. And if you will make a crosse for some other more Southerly starre, to wit, which declineth 20. or 25. degrees from the Aequator: then you must beginne your accompt from the same degree vnto the Aequator, and then Northward vnto the ende of the staffe, as before. But if you will apply your Crosse vnto those starres, which haue Northerne declination: as are the right and left shoulder of Orion: of which the one declineth from the Aequator Northward six degrees and ½ the other fiue degrees, and ½: you must begin your reckoning, at like degrees, vnto which afterwardes you add as many more, from the first degree of the Aequator: in such order that the midst of the crosse, and the nether end of the staffe, may exactly touch the Aequinoctiall, although the beginning was taken higher and more to the North. In this maner may a crosse staffe be made perfect, and applied to all sortes of starres, as may be seene in the Patterne.

THE MAKING OF A CROSSTAF



HOVV TO DRAVV

and vse a true and perfect Sea Carde.

FIrst with a large paire of compasses, you must drawe a circle: and then deuide it with two diameters in 4. euen quarters: euery of which is to be subdiuided in foure equall partes, to represent the sixteene pointes of the compasse. This done, draw first the lines of East, West, South and North: next of Southest, Northwest, Southwest, Northeast. Then of West Southwest, East Northeast, South Southeast. North Northwest, East Southeast, South southwest: West Northwest, North, Northeast: And lastly the bywindes, as West and by South, South and by West, and so forth, which must from poynt to poynt be extended, vntill all the poyntes be drawen.

Your Sea-card in this sort drawen: get in a readines a perfect patterne of some Sea-card: and fasten it vnder yours in such maner, that the lines of the one, may answere the lines of the other, which done, set thē both vpon some table of glasse, against the light, and draw your Carde with black leade, that ye may after perfect it with your penne. For so shall you haue an absolute, and authenticall Sea-carde.

It remaynes to intreate of the vse of it. Suppose you are to sayle from the Lizard, or from Vshant to Spaine or the Tercera (which is one of the Flemishe Ilands) heere must you take a course fit for your voyage, placing your center, or first pricke in that poynt, so farre distant in the Carde from the saide countries, as you gesse your selfe to be distant indeede: that so beginning at this pricke, for one or two 24. houres space, you may holde your course Southwest or Southwest and by South. Then take two paire of compasses, and with one paire measure the leagues, which by gesse you you haue run, extending it so long, till the feete of both paire meete: There with a blunt needle or the sharpe foote of the compasse, you shall make a nelw pricke, which may be defaced againe with chalke.

But

But if you happen to shape an other course to wit, to the South South-West, or West South-West: then must you commit to memorie how farre you haue sayled, and runne on this or that poynt. Wherefore it auayleth sometimes to cast out a line a stearne, with a lead to it, fastened to a pole or some peece of Woode, and setting the compasse aloft in the poope, to consider how much the ship goeth to the Leeward, or misseth of the intended course, that you may lesse erre in getting your course. This done, with one paire of cõpasses measure the leagues frõ the last prick, but with the other the course or poynt: and there againe make a new pricke: and so forwards. For one foot of the compasse must be set vpon that line in the Card, which aunswereth neerest to that point or course on which you haue sayled: and with the other foote must you seeke the ships course: But with the other paire you must compare with your kale how many leagues you haue run.

It is commendable euery 24. houres, to pricke the Carde once, and set downe how much you haue sayled and made: that in the degrees of the Carde you may see, what height you are in, and how all capes and coasts beare from you. It is also a goodly matter for the master euery morning and euening to write, or cause to be written downe, what course and vppon what point he hath runne: that afterwardes also in his Sea-card this may be noted and considered how the capes and chanells beare from hym: whosoeuer shall vse such a Sea Carde, as is here described: shall enioy thereby no small opportunitie and commoditie, in right sea-faring.

THE

THE COVRSES OF ALL THE COASTES OF HOLLAND, ZELAND, *Fraunce*, and *Spaine*, vppon what poynt and *in what distaunce they are.*

From the Ile of Texel vnto Egmont, South and by west. leagues 5.
From Egmont vnto the Maze, s. s. w. leag. 11.
From the Maze vnto the VVielinge, s. w. leag. 12.
From the VVieling vnto the head or straite betwene Douer and Calice, —— w. s. w. leag. 18.
From the Ile of VValckeren or Flushing vnto Calice, —— s. w. and by w. leag. 22.
From Blackneſſe vnto Deepe, —— s. s. w. leag. 12.
From Deepe vnto Seyne head, or the riuer of Seyne, —— —— w. s. w. leag. 11.
From the Seyne head to the riuer of Cane, s. w. leag. 8.
From thence vnto Cape de la Hague, N. w. leag. 12.
From thence vnto the Caskets, w. and by n. leag. 8.
From the Caskets to Garnſey, s. w. and by w. leag. 4.
From Garnſey to S. Malo, —— s. s. e. leag. 10.
From Garnſey to the Sept Iles, s. w. and by s. leag. 12.
From the 7. Iles to S. Poul, —— w. s. w. leag. 8.
From thence to the Fourne, —— w. s. w. leag. 10.
From the Caskets to the Fourne, s. w. & by w. leag. 34.
From the Fourne to S. Mathews poynt, s. s. e. leag. 3.
From thence to Fontenau or Fonteynes. s. & by e. leag. 5.
From Vſhant to the Seams, ſeabord it, South leag. 7.
From Fontenau to the weſt Pennemarques, s. e. leag. 7.
From thence vnto the Ile of Croye, E. & by s. leag. 12.
From the weſt Pennemarques to Bel Ile. E. s. e. leag. 15.
From thence to Heys ſomewhat more eaſterly, South East, —— —— —— leag. 12.
From thence agayne vntill within Piquelier, East and South, —— —— —— leag. 10.
From thence agayne vnto Croyſill, E. & by s. leag. 9.
From Picquelier vnto Heys, s. and by w. leag. 5.
From Heys to the Kiliats, East South-east. leag. 10.
From the Ile of Heys to Porthuys, South-east and by East. —— —— —— leag. 12.
From S. Martins Iland to the burning Ile. South-east and by East, —— —— leag. 3.
From the burning Ile to the Oyſter banke, South South-east, —— leag. 3.
From S. Martins Ile to the tower of Cordam, South and by East, —— leag. 12.
From thence vnto Bayone, S. and N. leag. 28.
From Bayone to Orio, w. ſouthweſt, leag. 5.
From Orio vnto S. Ian de Luz. E. S. E. leag. 6.
From Orio vnto S. Andrew, w. and by s. leag. 20.
From S. Andrew to Cap de Pennas, E. and w. leag. 30.
From Cap de Pennas to Ribadeo, s. w. & by w. leag. 12.
From Cap de Pennas to Ortegal, w. & by w. leag. 20.
From Ortegal vnto Ribadeo, —— S. E. leag. 14.
From Ortegal vnto the Ile of Cizarga, South-weſt and by weſt, —— —— leag. 13.
From Cizarga vnto Coronna, E. S. E. leag 6,
From thence vnto Cap de Coriana, w. S. w. leag. 10.
From Coriona to Cap Finiſterre, S. and N. leag. 3.
From Finiſterre vnto Bayone, s e. & by s. leag. 14.
From Bayone vnto Port de Port, s s. east. leag. 18.
From Port de Port to Aueiro, S. and by N. leag. 8.
From Aueiro to Montega, s. s. w. leag. 5.
From Montega vnto the Barlinges, s. w. leag. 12.
From the Barlinges to Roxende, s. and by e. leag. 12.
From Roxende to S. Vues poynt, South-east and by ſouth, —— —— leag. 8.
From thence vnto Cape S. Vincent, South and North, —— —— leag. 24.
From thence vnto Pharo, East, and weſt. leag. 14.
From Pharo vnto Lepe, N. E. and by E. leag. 12.
From Pharo to Saltees, E. North-east. leag. 18.
From Saltees to Chipiona, South-east leag. 8.
From Chipiona to Calis Malis, South-east leag. 6.
From Calis vnto the ſtraight of Gibraltar, South ſouth-east. —— —— leag. 8
From Calis vnto Cap de Cantin, South-weſt and by ſouth, —— —— leag. 60.
From Cap de Cantin to the Ile of Madera, w. leag. 104.
From Cape S. Vincent to Madera, South-weſt and by weſt, —— —— leag. 115.
From Roxende to Madera, South-weſt leag. 130.
From Roxende to the Ile of Tercera, weſt leag. 210.

THE COVRSES OF ENGLAND, Ireland, and Scotland.

From Boecknes vnto Leeth in Scotland, South South-weſt, —— —— leagues 28.
From Leeth vnto Barwicke, S. ſouth-east. leag. 8.
From Barwicke vnto the Holy Ile, E. S. E. leag. 4.
From S. Abbes head to the Eaſterne end of Farne Iles, —— —— ſouth-east leag. 6.
From the Iles of Farne to the Tees mouth, South ſouth-east, —— —— leag. 16.
From the Riuer of Tees to Flamborough head, South-east and by East, —— leag. 14.
From Flamborough head to Blackney, S. E. leag. 18.
From Blackney vnto VVinterton, ſouth-east leag. 8.
From VVinterton vnto Leſtoft, s. & by eaſt. leag. 8.
From Leſtoft vnto Orford hauen, ſouth. leag. 7.
From Orford vnto the Forland, S. ſouth-east. leag. 13.
From the Forland to Douer, ſouth. leag. 5.
From Douer to the Shingles, or the Neſſe poynt, ſouth-weſt and by weſt, —— leag. 7.
From the Neſſe poynt vnto the Beache, w. s. w. leag. 6.
From the Beache to the Ile of VVight, weſt and by ſouth. —— —— leag. 15.
From VVight vnto Portland. w. and by s. leag. 10.
From Portland to the Start poynt, w. s. w. leag. 14.
From the Start vnto Ramshead poynt, w. n. w. leag. 6.
From Ramshead vnto Dudmans poynt, w. s. w. leag. 8.
From Dudman to the Lezard poynt, ſouth-weſt and by weſt. —— —— leag. 6.
From the Lezard to the Iles of Seellye, w. leag. 12.
From the Lezard to the Lands-end, w. n. w. leag. 8.
From Englands end vnto the Ile of Lundy, North-east. —— —— —— leag. 14.
From thence vnto the Holmes of Briſtol. North-east and by East. —— —— leag. 16.
From thence to the Ile of Caldie. w. s. w. leag. 12.

From

From thence to the Iles of Salteys, on the coastes of Ireland, west north-west, leagues 20.
From Salteys to Cape Cleere, w.south-west. leag.25
From Cape Cleere to the Ile of Dorsey, west, leag 12
From the poynt of Dorsey to the Ile Blakem, North north-west. — — leag.16
From Blakem vnto the Iles called Arran, North north-east, — leag.14
From the Iles of Arran to Galwicke, or the Galfe in Ireland, East north-east, leag. 6

OF DIVERS AND SVNDRY Courses ouer the VVesterne Seas.

FRom the Texel on the coasts of Holland, to Flamborough, west north-west, leagues 45
From Texel vnto VVintertowne in Norf. w. leag 32
From the Ile of Texel vnto Lestoft, w. & by s. leag.28
From the Riuer of the Maze in south Holland vnto Harwich in Suffolke, west, leag.26
From the said Maze to the foxland of England, west and by south, leag.25
From the Marsdeep in North Holland, to the said foxland, south-west, leag. 36
From the said Marsdeep to Calice, s.w. & by s. leag.58
From Douer vnto Bulloyne, south-east, leag. 8
From Bolloyne to the Beache, west, leag.16
From the Beache to Deepe in Normandy, s e. leag.18
From Deepe vnto the Ile of VVight, E.s.e. leag.28
From VVight to the Seyne head, or mouth s.e. leag.20
From the said riuer of Seyne to Portland w.n.w. lea 30
From the Ile of VVight vnto the Caskets, South-west and by south, — — leag.14
From Garnsey into S. Malo in Normandy, s.s.e. leag.8
From the Caskets to Portland, N. and by w. leag.10
From the Caskets to the Start poynt, w.n.w. leag.16
From the Start to the Sept Iles in Normandy, South south-east, — — leag 24
From the Start to S. Poul in Nor. s. & by w. leag.22
From S. Poul to Portland, N.E. and by N. leag.32
From the Fornes to Ramshead, N. N. E. leag. 28
From the Start poynt vnto Vshant, s.w. & by s. leag.32
From the Forne to the Lezard, S. and N. leag.22
From Vshant to the Iles of Silley, N. n. w. leag.26
From the Sorlings to Milford hauen, N. & by E. leag.25
From the Sorlinges to VVexford in Ireland, North north-west, — — leag.34
From the Sorlings to Cape Cleere, N.w. leag.42
From Cape Cleere to Cape Finisterre, S. & N. leag.130
From the Lezard to Cape Finisterre in Galicia, South south-west, — — leag.112
From Vshant vnto the Ile of Cizarga in Galicia, South south-west, — — leag.85
From Vshant to Laredo in Biscay, S. southeast. leag.85
From the Seames rockes to S. Sebastian in Biscay, South-east and by south, — leag.90
From Vshant againe to Cape de Pennas in Biscay, South and North. — — leag.70
From Bel Ile vnto Ortegal in Galicia, s. w. leag.75
From S. Martins Ile to Ortegal, w. s. w. leag.85
From Ortegal to Cape de Coriana, s.w. & by w. leag.24
From Cape de Finisterre to the Iles of S. Michael, west south-west. — — leag.185
From S. Michael to the Ile of Tercera, N.w. leag.26
From Cape de Finisterre to the Ile of Madera, south-west and by west, — leag.190
From Madera vnto the great Ile Canarie, South and by East, — — leag.60
From Cape de Finisterre to Bayone in Galicia, south-east and by east, — leag.15
From Cap de Finisterre to the Iles Barlinges, South and North, — — leag.50
From the Barlinges in Portugal to the Ile Canarie, south south-west, — — leag.170
From the Ile of Madera to Calis Malis, E.n.e. leag.150
From Calis to Cape de Cantin, s w. & by s. leag.65
From Cape de S. Vincent to Cape de Cantin, south and north, — — leag.62
From Cape de Vincent vnto the Ile of Madera, south-west and by west, — leag.120
From Roxent in Portugal vnto the Ile of Tercera, East and west, — — leag.210

THE COVRSES OF NOR-way, Swedeland, & Eastfinland.

FRom Schuytenes to the Vesteen, s. & by e. leag.4
From Veesteen or VVostone to the Iedder, south south-east, — — leag.4
From the Iedder to the Vorsteen or forstone, s.e. leag.5
From the Forstone to the Noes, E. southeast, leag.6
From the Noes vnto Reperwick, E. N. E. leag.8.
From Reperwick to Mardou, North-east, leag.10
From Mardou vnto Iofferland, North-east, leag.8
From Iofferland to Langhesondt, N. N. E. leag. 1
From Longhsondt to Ferderoer, N.E. & by E. leag.6
From Ferderoer vnto Soenwater, North leag. 6
From Ferderor vnto Roeghe, N. north-east, leag.4
From Ferderoer vnto Akersond, E. north-east, leag.6
From Akersond to Maesterland, S.E. and by s. leag.14
From Pater noster to Nydinck, south-east, leag.8
From Nydinck to VVaerberghe, s. e. & by e. leag.4
From VVaersberoghe to Swederoer, s. s, e leag.6
From Swederoer vnto Col, s. south-west. leag. 3
From Col vnto Lappesandt, south-east, leag. 3
From Lappesandt vnto VVeen, s. south-east, leag. 2
From VVeen vnto Drakerriff, s. & by east, leag. 7
From Drakerriff to Steden, s. and by w. leag.4
From Steden vnto the North end of Bornholm, East and by North, — — leag. 15
From Bornholm vnto Anno, N. and by w. leag.8
From Anno vnto the Rockes, North-east, leag 8
From the Rocks vntill within the Calmersond, North north-east, — — leag. 10
From Calmersond to the Sweedish Ionckfrou, North north-east, — — leag. 8
From the Ionckfrou to Landsoort, N. N. E. leag.8
From thence vntil before Duyrhauen, n.e. & by e. leag.8
From the Stockhoms Schares to view of Abo, North east and by North, — — leag.24
From Vieu vnto Luns Vtschares, E.N.E. leag.28
From the Vtschares to ꝑ Ile Putsuagro, e. & by n. lea.30
From thence vnto Somere, E. and by w. leag. 9.
From Somere to the red Hol of VViburgh N.E. leag.9
From the Red hole to Traelsand, N.E. & by N. leag.2
From thence vnto VViburgh, leag.2

DIVERS COVRSES VPON the whole Easterne Sea.

FRom Bornriff to Bouenberghe, N. N. E. leag.45
From Bouenberghe to the Noes, N.N.w. leag.24
From the Noes vnto the Eems, S. and by E. leag.58

From

From the Noes to Bornriff, S. and N. leag. 75
From the Noes vnto the Ile of VValckeren in Zealand, South and by west, —— leag. 92
From the Noes to the Holmes before Yermouth, south south-west, —— leag. 80
From the Noes vnto Tynemouth, S.w. & by w. leag 78
From the Noes vnto Bocknes, west leag. 68
From the Noes vnto the Holmes, south-east. leag. 17.
From the Noes vnto Sckaghen, East and west. leag 25.
From Sckaghen vnto Mardou, N. w. leag 16
From Sckaghen to Langhsond, N. N. w. leag. 16.
From Sckagen to the Ferdet, N. and by w. leag. 15.
From Sckagen to Maesterland, E.N.E. leag. 10
From Sckagen to the Trindell, S.E. and by E. leag. 7
From the Trindell of Lesou, vnto Anout, s.c. leag. 8
From Anout to Col. South southeast. —— leag. 9
From Col to Aselyn on Zealand in Den-marcke, south west and by west. —— leag. 8
From Aselyn to Steuens head. w.N.w. leag. 14
From Falsterboner riffe to VVitmont, s.e. & by s. lea. 14
From Steden to Bornholme, E. and by S. leag. 16
From Bornholm to Reefcol, east and by north. leag. 20
From Bornholm to Coolsberghe, south-east. leag. 10
From Bornholm vnto the Rocke, north n.e. leag. 15
From Bornholm to Houbourgh, n.e. —— leag. 38
From Houbourgh to Rygs head, south and N. leag. 28
From Houbourgh vnto the VVindou, E.N.E. leag. 26
From Oostergarde vnto the VVindou, E. & w. leag. 20
From the VVindou to Dageroort, N.E & by n. leag. 28
Frō Dageroort, vnto the Gotsche sand, n.e. & by. n. lea. 18
From Dageroort vnto the Vieu, N.w. & by N. leag. 10
From the Gotsche sand to Bouschaer, N. & by E. leag. 15
From Marien vnto Elsenuos, N.N.E. leag. 14

THE COVRSES OF FRISLAND, IVTland, Pomeren, Courland, and Lyffland.

FRom Maers deepth in Holland, to Bornriff, n.e. lea. 10
From Bornriff to VVrangherooch, E.N.E. leag. 26
From VVrangherooch, to Holy land, north, leag. 5
From holy land vnto the River of Elue, southeast and by east. —— —— leag. 6
From Holy land to the River of Eyder, East and by North. —— —— leag. 6
From Holy land vnto Rypen, Northeast and by North. —— —— leag. 12
From Rypen, vnto Bouenbergh, N. n.w. leag. 25
From Bouenberghe to Holmen, N. N. E. leag. 6
From Holmen vnto Robbenknuyt, northeast. leag. 8
From Robbenknuyt to Sckaghen, north n.e. leag. 9
From Sckaghen vnto Zebay, south & by w. leag. 6
From Zebay vnto Hals, —— s and by w. leag. 5
From Hals vnto Steuens-head, s. s. E. leagues. 5
From Steuens-head to the great Helm, s. s.w. leag. 6
From the great Helm, vnto wero, s. s.E. leag. 3
From wero, vnto Bolsack, —— s. s. w. leag. 3
From Bolsack to Sproo, —— s. s. E. leag. 8
From Sproo, vnto Longh-land, —— s. E leag. 3
From Longh-land, vnto Lalants haeck or hoocke, south and North. —— —— leagues. 7
From thence vnto Femeren, —— s.E. leagues. 4
From the Ile of Femeren, to the Rae of Lubeck, south south west. —— leagues. 8
From Rae to Crycer-oort, N.E and s.w. lea. 4
From Cruyceroort, vnto Robbenes, northeast and by East. —— —— leag. 12
From Robbenes, to VVitmont, n. E and by E leag. 8
From VVitmont, to Iasmont, s. E. and by E. leag. 2
From Iasmont, to the Paert, —— s. s. e. leag. 2
From the Paert, vnto Colsberghe, E.n.e. leag 12
From Colsberghe vnto Garshooft or head, north east and by north, —— —— leagues. 10
From Garshead, vnto Reefcol, —— E.N.E. leag. 4
Frō Reefcol, vnto the Rifschehooft or head. E.n.e. lea. 12
From Rifschehead, vnto Heel, —— s.e. leag. 6
From Heel, vnto the VVissel of Danzick, s. & by w. lea. 4
Frō thence, to Conincxberghe deepth, n.E. & by E. lea. 10
From thence, to the Memel, —— n.N.E leag. 12
From the Memel, to Zeuenberghe, —— n.n.w. leag. 8
From Zeuenberow, vnto ỹ VVindou, N. & by E. lea. 14
From the VVindou, vnto Lyfercert, N.E. & by E. leag. 4
From Lyfercert, to Domsnes, —— E.N.E. leag 8
From Domsnes, vnto Runen, —— E. and w. leag. 6
From Runen, vnto Rygh, —— S.E. leag. 12
From Rygh, vnto Pernouth, N. and by E. leag. 14
From Pernouth, vnto the East end of the Olsel, west northwest. —— —— leag. 10
From thence, vnto the Swalaweroort, n.E. leag. 14
From thence, vnto Dagheroort, n.n.w. leag. 18
From thence, vnto Zyburgsnes, —— n.E. leag. 6
From Zybourghsnes, to Oitkens Holm. n.e. & by e. lea. 5
From Oitkins holm, to Narien, E.n.E. leag. 6
From Narien, vnto VVrangher, —— E. leag. 6
From VVrangher, vnto Eke-holm, E. and by s. leag. 7
From Eke-holm, vnto the Narue, E. and by s. leag. 12
From the Narue, vnto the Russe-haecke, n. leag. 4
From the Russche-hookes, to VVybourgh, —— —— north-east and by n. leag. 16
From the High Iland, vnto the Narue, s.e. leag. 10
From Highland, vnto Somere, n.e. and by E. leag. 10
From Highland, vnto Narien, —— w.s.w. leag. 20
From Narien to Luz, by the Scheeres, n.n.w. leag. 8
From Vieu, vnto Bouscher, s.w. and by s. leag. 12
From Bouschaer, vnto the great Carell, s s.w. leag. 10
From thence, to the South end of Godtland, —— —— s.e. and by s. leag. 6
From Houbergh, vnto the Ryghs head, South and —— —— by east. leag. 26
From Houbergh, to the South end of Oeland. —— —— south-west and by west, leag. 18
From Oelandt, vnto Bornholm, s.w. and by s. leag. 20
From Oelandt, to the Rygish head. s.e. leag. 22
From Bornholm, vnto VVitmondt, s.w. leag. 9
From Dorenbosch, vnto Moen, —— n.w. leag. 7
From Moen, vnto Gheester riffe, —— s.s.w. leag. 6
From Gheester riff, vnto Lubecke, s.w. and by w. lea. 14

The Sea courses on the backside of Moscouie, and generallie of allour trafficks.

FRom Candalex, vnto Ombay, s.e. and by e. leag. 10
From Ombay, vnto Stalsland. south east. leag. 8
From Stalsland, vnto VVarsiga, —— E.s.E. leag. 12
From VVarsiga, vnto Caroa, —— E.s.E. leag. 8
From Carea, vnto Karswyck, —— E. leag. 5
From Karswyck, vnto Polongi, —— E.n.E. leag. 6
From Polongi, vnto Sautsnawitz, n.e. by e. leag. 6
From Sautsnawits, vnto the Iles, n.n.E. leag. 10
From the three Iles, to Orlogonos, n.n.w. leag. 4
From Orlogonos, to Sweetonos, n.w. and by n. leag. 12
From Sweetonos, to the Seuen Iles, s.E. leag. 18
From the Seuen Iles, vnto Kildin, s.E. leag. 24

From

From Kildin to Lauwes, N.w. and by N. leag. 8
From Lauwes to Oosterhauen, —— S.E. leag. 10
Frō Oosterhauen to VVaerhuys, N.w. & by N. leag. 10
From VVaerhuys to Matcorf, N.w. leag. 10
From Matcorf to Northkin —— w.N.w. leag. 12
From Northkin to the North Cape E. and w. leag. 10
From the North Cape or Loppe to Trompsont w.S.w. —— —— leag. 40
From Trompsont to Lofsoote, —— S.w. leag. 38
From Lof-soote to Rust, —— S.S.w. leag. 25
From Rust, to Stad S.w. more S. leag. 90
From Stad to Berghen, —— S. and N. leag. 30
From Berghen, vnto the VVtsiers, S. and by E. leag. 30
From the VVtsiers, to the Noes, S.E. leag. 29
From Schaghen, to the Riff, s.w. and by w. leag. 24
From the Riff, to Calice by Flaunders, s.s.w. leag. 95
From the Heads to the Shingles, or Nesse poynt S.w. and by w. —— —— leag. 9
From the Nesse poynt to Beachy, w.s.w. leag. 7
From Beachy to the Ile of wight, w. and by s. leag. 15
From VVight, to the Start poynt, w. and by s. leag. 26
From the Start to without Vshant, S.w. & by w. —— —— —— leag. 30
From Vshant to Cizarga, —— s.s.w leag. 86
From Cizarga to Cape de Finisterre, w.s.w. leag 12
From Cape de Finisterre to the Barlings S. and N. —— —— —— leag. 50
From Cape de Finisterre, to the Tercera, w. and by S. —— —— leag. 120
From Cape de Finisterre to the Ile Madera, S. w. and by S. —— —— leag. 180
From Madera to the great Canarie, s. & by E. leag. 60
From Forteventura to Palma, —— w. leag. 60
From Porto Santo to Madera, —— s.w. leag. 10
From Porto Santo to Cape S. Vincent, N. E. and by E. —— —— leag. 104
From Cape S. Vincent to Lanes, E. and by N. leag. 5
From Lanes to Pharo, E. and by s. leag 20
From Pharo or Cape de S. Maria to Auila, N.E. leag. 4
From Faro to Leep N.E. and by E. leag. 13
From Faro vnto Saltees, —— E.N.E. leag. 18
From Cape de Maria to Rodun, E. and by N. leag. 22
From Cape de Maria to Chipiona —— E. leag. 23
From Cape de Maria to Calis Malis, E. and by s. leag. 28
From Cape de Maria to the Straict, s. E. and by E. —— —— —— leag. 36
The Straict of Gibraltar hath his course through, E. and by N. —— —— leag. 5
From the Straict of Gibraltar, to Malaga, N. E. —— —— —— leag. 28
From Malaga to Almeria, —— E. leag. 28
From Almeria to Cape de Gates E. and by S. leag. 5
From Cape de Gates to new Cartagena, N.E. leag. 28
From Cape de Palo to Cape de Martin, N.N.E. lea 32
From Cape de Martin to Valentia, N.N.w. leag 10
From Valentia, vnto Tortosa, —— N.E. leag. 18
From Valentia to Cape de Calo, N.E. leag. 9
From Cape de Calo to Barzelona. N.E. and by E. leag. 16

THE LATITVDES OR ALTITVDES OF THE Pole of the most famous places, poynts, and Capes, both of the *Easterne and Westerne Nauigation.*

	de.	mi.
The Iles of Solosky lie in	64	45
Ombay in ——	64	40
S. Nicolas in ——	64	40
Kildine in ——	69	34
The North cape of Norway.	71	30
Samien Ilands. ——	70	0
The Slorp, or Mousko streame.	67	39
Dronten. ——	64	30
Stadt. ——	62	0
Boukenes of the Noes, and the Schaw.	57	50
Berghen in Norway.	60	20
The South cape of Yzland.	65	36
Wiben Iland. ——	65	10
The North cape of Yzland.	68	35
Grinsas Ile. ——	68	40
The Southwest end of Groenland. ——	73	0
Faharil ——	59	40
Reuel in Lifland. ——	59	55
Window, and Eastergart.	57	40
Bornholm. ——	55	20
The Sound. ——	56	10
Bouenberghen. ——	56	38
Heylich or Holy land.	54	30
The Eems, or Borkom:	53	48
The Flie, ——	53	34
Texel. ——	53	8
The Maze. ——	52	0
Rammekens, or Walkeren.	51	25
Douer. ——	51	12
Portland. ——	50	40
The Caskets. ——	49	44
Vshant. ——	48	38
The Lizard. ——	50	4
The Start. ——	50	15
Studland poynt. ——	50	30
The Thames, London, or the North foreland. ——	51	34
The { Ile of Bresill.	51	20
The { Southermost point of it.	51	0
The { Northermost poynt.	51	40
Cape Dorsey in Ireland.	51	40
Asmaidas Iland. ——	46	50
The Seams. ——	48	4
Belyle. ——	47	28
S. Martins Ile. ——	46	26
The midst of Oleron. ——	46	0
The River of Bordeaux.	45	34
A casson. ——	44	50
The Sea coastes of all Biskay.	43	35
Cape de Torres. ——	40	0
Ortegal. ——	44	50
Cape Finisterre. ——	43	0
Bayon. ——	42	0
Port de Port. ——	41	0
Montega ——	40	0
Roxent. ——	38	56
Cape Spicket, or S. Wes head.	38	62
Cape S. Vincent. ——	36	58
Calis Malis. ——	36	20
The straicts of Gibraltar.	35	36
Prom. Herculis, Cape Cantin.	35	40
Prom. Atlantis. Cape d'Alguer.	30	15
Grand Canarie. ——	28	20
The Ile of Palma. ——	29	0
The Lancerotta. ——	29	10
The Ile of Madera.	32	34
Porto Santo. ——	33	25
S. Michels Iland. ——	38	0
Tercera. ——	39	4
Teneriff. ——	38	10
The rockes of Arram. ——	56	6
The north end of Ireland.	56	6
The Burlings. ——	39	35
The North point of Scotland.	59	15
The Norther Ile of Leenos.	58	55
The South part of Rockol.	58	18
The Northren point of Rockol.	58	30
The South point of Fero.	61	45
The northermost point of Fero.	62	50
The South point of the Ile of Philo. —— ——	60	20
The North part of Philo.	60	26
The South Capes of Hytland.	60	14
The North poynt of those Ilands. ——	61	30

AN EXPLANING OF THE COMMON
Table of the Tydes and Ebbes.

WE haue marked, according to the custome of ancient Pilotes, vpon what poynt of the Compasse the Mone causeth high water in any of these places following. But you must know that these points may not be taken or counted after the moueable Compasse, which onely diuideth the Horizon in his plaine, and sheweth absolutely, in what Azimuth or Verticall circle, the Sunne or the Mone standeth: by which the floods are not gouerned. For experience teacheth, that the Sunne entring into Cancer, in his greatest declination: in Spaine, and other countries hauing the like Eleuation of the Pole, commeth first into the East point at eight of the clocke in the morning, and into the West point at foure in the afternoone. But in our Climate about halfe an houre after eight, and as much before fiue: So that in 8. or 9. houres, by this Compasse account, he finisheth his course from the East to the West: and contrariwise by night from the West to the East in 15. or 16 houres. But this happeneth once a moneth to the Mone, which sometimes endeth hir course from the East to the West almost a whole houre sooner then the Sunne, because she ascendeth aboue 5. degrees more Northward then the Sunne. Therefore you must vnderstand, and conceaue in minde; as if the lines of the Compasse were drawen from the Pole of the world: For then, be the Sunne and Mone high or low, euer at fire of the clocke they are in the East and West. By which occasion, seeing those lines are none other, then the houre circles, we haue reduced these vnto these: allowing vnto euery line 45 minutes or three quarters of an houre: so that foure lines, make three houres; and eight, six. Thus may the tydes be reckened by this Table, for any place or day, so that the Mones age be knowen. Seeke the day in the right line, in which your place standeth, and it shall shew you the houre and minute of the tyde. Fol. 31.

For asmuch as the Easterne Sea, hath no Ebbe neither Flood. Therefore shall we beginne this reckoning of the tides, from the Iutlandish Ilands.

What Moone maketh full Sea vpon the Coastes of Iutland, Frizland, Holland & Zealand.

AT the Iutlandish Iles haue you full Sea with a	South and North Moone.
Before the Riuers of Heuer, Eyder, and Elue, haue you full flood with a	South and North Moone.
At Amborough with an	East and West Moone.
Underneath Holyland with a	West south-west. M.
Before the Riuer of Weeser with a	South and North M.
Before the Easterne and Westerne entrances of the Eems, or the Riuer of Embden with a	South-east & North-w. M.
Before all the Coasts of Frizland with a	S.E. and N.W. M
Before the Flye with a	South-east & North-w. M.
Before Gheest of Texel with an	East south-east M.
Before the Maersdeep with an	East and west M.
Vpon the flattes of west Frizland, & of Wieringe	S.E. & N.w. M
Before the Fen in the chanell of the Sea with a	S.S.E. M.
At Enchuysen, and the Ile of Vrck with a	S. and N. M.
At Horne, and Edam with a	S.S.w. M.
At Amstelredamme, with a	S.w. and N.E. M.
At Egmont, and Haerlem, with a	w.S.w. M.
From Haerlem, vnto the Riuer of the Maes.	S.w. and N.E.
Before the Maes, and the Ile of Gœre, with a	S.S.w. M.
At Rotterdam, with a	S.w. and N.E.
On all the Sea coastes of Sealand, with a	S.S.w. M.
At Antwerpe, with an	E. and w. M.
Before the Wielinghe, with a	S.S.w. M.

Full Sea vpon all the coastes of Flaundres, Normandie, Britaine, Gascoine, Biscay, Galicia, Portugall, and Spaine.

ON all the coastes of Flaunders, with a	S. and N. Moone.
On the out side of the banckes of Flaunders	S.w. & N.E.
At Swaertenes, or Blackney, with a	S.S.w. M.
At Bolleyne, Deepe, and at Seyn head, or the mouth of the Riuer of Seyne, with a	S.S.E. M.
Within the Seyne, with a	S.E. M.
Before the hauen of Cane, with a	S. and by E.
Within the Fosse of Cane, with a	S.S.E. M.
Before Cherborough and the Ras of Blancquert.	S. and N. M.
At the Ile of Garnzey,	W. and by S.
At Concall, and saint Malo,	E. and w. M.
At the Sept Iles, with a	w.S.w. M.
On saint Poul and on the out side of Vshant	E. and w. M.
On al the coasts of Britaine, Poictou, & Gascoine,	S.w. & N.E. m.
In the Baye within Vshant,	w.s.w. m.
At saint Mathews poynt, and at Fontenau.	S.w. and by S. M.
Before the Riuer of Nantes, and before the Bay.	S.w. & N.E. M.
Before the Kiliates, and Porthuys, with a	S.w. and N.E. M.
Before Brouage, in the Riuer, with a	S.w. and by w. M.
Before the Riuer of Bordeaux, with a	S.w. and N.E. M.
Within the Riuer of Roiane, with a	S.w. and by w. M.
On all the coastes of Biscaye, Galicia, Portugall and Spaine, with a	S.w. and N.E. M.
Within all the hauens aforesaid, with a	S.w. and by w. M.
At saint Ian de Luz, with a	S.S.E. M.
In the Condado, with a	S. and N. M.

Full Sea on all the Coastes of England, Scotland, & Ireland.

AT Tinmouth, before the Riuer of Newcastell,	S.w. Moone.
Before Hartlepool, or the Riuer of Tees mouth, a	S.w. M.
Before Whitbuy and Robbinheads Bay, with a	S.w. M.
At scarborough and Flamborough head,	w.S.w. M.
At Hull within the Riuer of Humber	E. and w. M.
Before the hauen of Lynn, with an	E. and w. M.
Before Humbers mouth in the Sea, with a	N. w. M.
At Burnam and Blackeney, with a	E. and w. M.
Before Cromer, Winterton, and Yarmouth, with a	S.E. M.
At Yarmouth, and Lestoffe, with a	S.S.E. M.
At Orford, and Harwich, with a	S. and by E. M.
On the outside of Harwich bankes	S.S.E. M.
Before Margate and the Thames mouth, with a	S. and by E. M.
At the Foreland, with a	S. and N. M.
In the Downes before Sandwich	S.S.w. M.
At Douer within the hauen	S. and N. M.
In the middes of the Heads or Straight.	S.w. M.
Alongst the Shingles, or the Nesse poynt.	S.S.w. M.
Within the Chamber before Winchelsey.	S. and by E. M.
Before the Beach at shore, with a	S. and N. M.
At Hampton before the Kay, with a	S. and N. M.
Before the Ile of Wight and Portesmouth.	S. and by E. M.
On the West end of Wight, with a	S.S.w. M.
By Portland in the Channell, with a	N.N.w. M.
Within the Ras of Portland, with a	S.E. M.
Before the Startpoint in the Channell.	w.N.w. M.
Within Torbay and Dartmouth, with a	w. and by S. M.
Within Plymmouth and Foye, with an	w. and by S. M.
Before Foye in the Channell, with an	E.S.E. M
At the Lizard to shore, with a	E.S.S. M
Before the Sorlinges or Silley, in the Channell.	E. and w. M
Betweene Foye & Falemouth, in the Channell.	w. and by w. M
Within Montsbay, with a	E.N.E. M
Within the Iles of Silley or Sorlinges.	N.E. by E. M
At Lundy, and at the Holmes of Bristow.	E. and w. M
Within Bristow to the shore, with an	E. and by S. M
In the Sea of Wales or Seuerne, with a	w.S.w. M
At Caldie and Milford, with a	w. and by S. M
At Waterford, and all the Sea coastes of Ireland.	w.S.w. M
All the West coastes of Ireland.	w.S.w. M

AN INSTRVCTION TO

KNOVV HOVV MANY LEAGVES YOV DO SAILE VPPON EVERY POINT OF THE COMPASSE FOR A DEGREE: VVHEN YOV TAKE YOVR COVRSE BESIDES THE SOVTH OR NORTH OVT OF THE RIGHT MERIDIAN LINE: And hovv muche you decline tovvardes the East or vvest, vppon euery poynt or course, on this side or beyonde the Aequinoctiall.

VPon the South or North point, vve hold still one Meridian,	leag.	15.
and you shall sayle to rayse one degree.		
VPon the South and by vvest poynt, for one degree.	leag.	15. ½
you are declined from the Meridian.	leag.	3.
pon the South South-vvest poynt, for one degree.	leag.	16.
you are declined from the Meridian.	leag.	6.
pon the Southvvest and by south poynt, for one degree.	leag.	18.
you are then declined from the Meridian.	leag.	10.
pon a Northeast and a southvvest course, one degree is	leag.	21.
then are you declined from the Meridian.	leag.	15.
on a southvvest and by vvest course, one degree is,	leag.	27.
then are you beside the Meridian.	leag.	22.
on a vvest southvvest course your sayle for one degree.	leag.	40.
then are you past the Meridian.	leag.	36.
pon a vvest and by south course, for one degree you run,	leag.	78.
then haue you left the Meridian Line.	leag.	75.

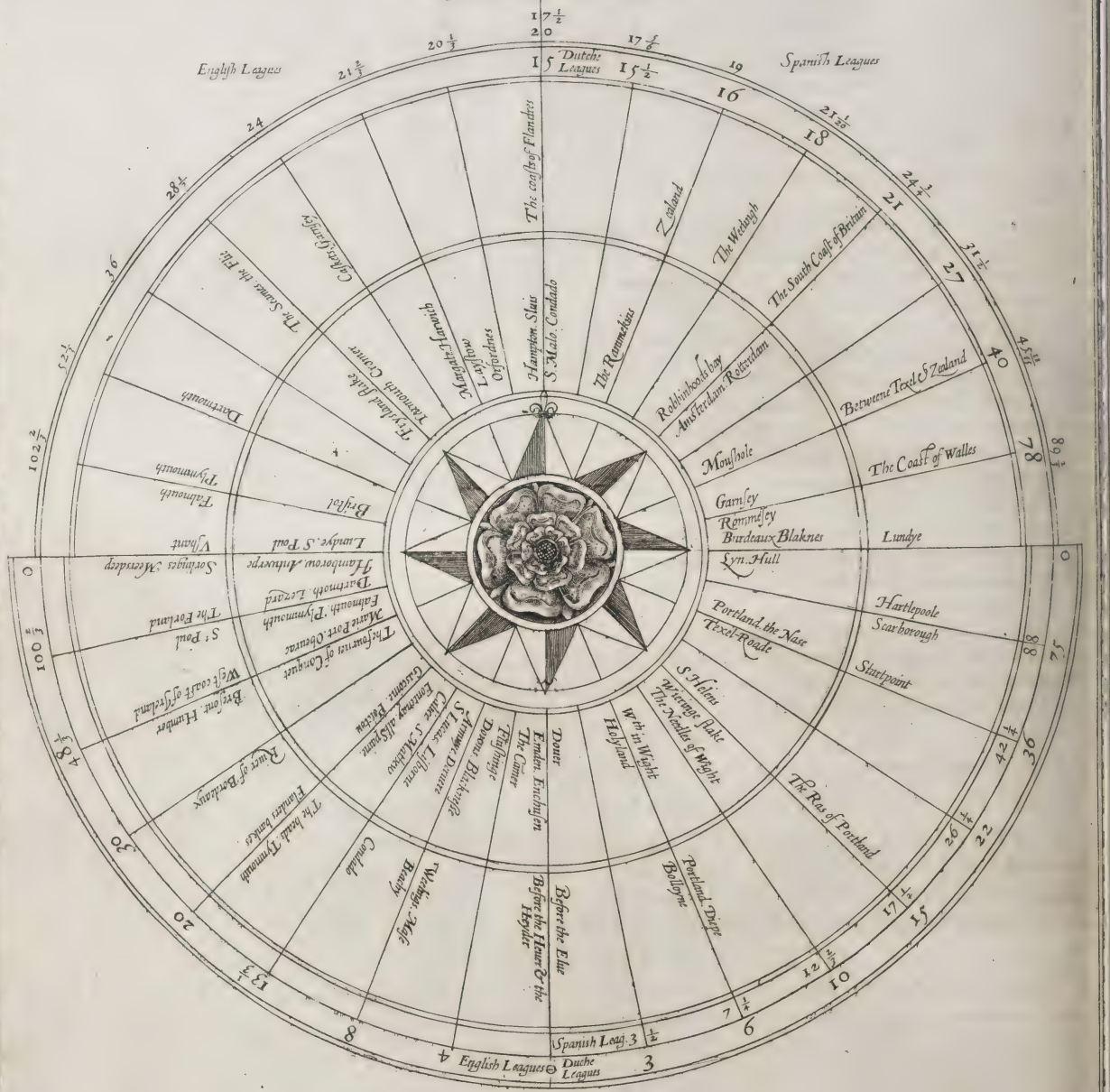
t sayling an East and VVest course, you remayne alvvayes in the same Parallell betvveene the Pole and the Aequator, declining neither Northvvardes, nor southvvardes: but keeping the same height of the Pole continually. After this maner may you consider the other three quarters.

COMPASSE AND TABLE CONTAINING THE READIEST AND SHORTEST VVAY TO FIND OVT AL THE TIDES ALONGST AL THE COASTES OF SPAINE, FRANCE England, Ireland, Flaunders, Holland and Frisland, as well within the hauens as without from shoare: of which compasse the inner Circle sheweth the full seas vpon all those coastes, and in the hauens themselues.

The other vtter Circle sheweth the full seas off from shoare alongst all those saide coastes in the chanels, or other deepes.

THIS VPPER HALF CIRCLE

declareth the Nomber of Leagues, that you must sayle uppon eache point of the compasse, before you can rayse or laye a Degree, Southwards or Northwards.



The nether half circle conteineth the Number of Leagues w.ch you run from y.e Meridian in altering of each point of the Compasse

A DECLARATION OF THE TABLE FOLOWING, WHICH CONTEIneth all the full seas and ebs vpon the same point.

THis is first to be noted, that all the places, which haue their full seas on the same poynete, are sorted togither in the table following, whose partes haue this order. The first number of the Columne noteth the age of the moone: the two that follow signifie the houres and minutes of the tide in those places assigned. As for example. At the new or full moone, you haue at Enchuysen, and in all the places ranged with it, vnder the title of a South and North Moone, full sea at 12. a clocke. When the Moone is one day old, it shall be there full sea at 12. of the clocke 45. minutes: When she is two dayes olde, at 1. a clocke, 30. minutes. A three dayes moone, at 2. a clocke 15. min. and at foure dayes, at 3. a clocke. Then is she horned, and hath runne the eight part of hir course. But when she shall be halfe full or one quarter olde, it shall flow still in those places till six a clocke, morning and euening. After this the tide shall be later euery day then other, by three quarters of an houre. Thus by this which hath bene sayd, the iust time of the full sea, may be accounted with ease, in what place soeuer.

As euery 15. day, one poynt of the cõpasse is giuen ouerplus to the ful moone: the cause is, that the compasse hath 32. pointes, and the moone but 30. dayes. Whereupon in this table of Tydes you must begin your account agayne at the full or new moone, the 15. day. And when the moone is halfe a quarter olde, being Northeast, and SouthWest, it shall be high water at 3. in the morning, and afternoone. But on the quarter dayes an East and West moone at 6. a clocke morning and euening, shall cause full sea. For in this maner are the tides reckoned of Pilotes and all Mariners euery day.

A perfect Table to find out easily, vpon each poynt of the Compasse, what day of the Moones age,

S and N Mone, full Sea.				The Ebbe vpon the same point.
0	12	0	At all the Iles of Iutland,	From the Ness vnto Bollaine.
1	12	45	Before the Eyder and Heuer,	
2	1	30	Before Delfzyle and Embden.	
3	2	15	Before Enchuysen, Vlk,	
4	3	0	all the shoares of Flaunders.	
5	3	45	Beachy shoare.	
6	4	30	At the Foreland,	
7	5	15	Within Harwich.	
8	6	0	At Douer.	
9	6	45	At Concalo, S. Malo.	
10	7	30	In the Condado.	
11	8	15	At Hamton haye.	
12	9	0		
13	9	45		
14	10	30		
15	11	15		

S.w. and N.E. Mone, full Sea.				The Ebbe.
0	3	0	Betweene the Heads.	From Cape de la Hague, vnto the Ile and Ras of Alderney.
1	3	45	At Fontenay.	
2	4	30	All the coastes of Spaine,	From Iarsey vnto the Casskets.
3	5	15	Gascoine, Poictou, and	
4	6	0	without the bankes of	From Mylford, vnto the
5	6	45	Flandres.	Ramshead, before Foye.
6	7	30	The South coastes of	In the Ras of Portland.
7	8	15	Britaine.	
8	9	0	Before New Castell.	
9	9	45	In Robbenhoods baye.	
10	10	30	At Amstelredam.	
11	11	15	Dordrecht.	
12	12	0	Zierick sea, and Rotterdam.	
13	12	45		
14	1	30		
15	2	15		

E. and W. Mone, full Sea.				The Ebbe.
0	6	0	On the outside of the Sorlinges.	From the Caskets, to Dierliet.
1	6	45	Before Hamborough.	From the lands end, vnto the Lyzard.
2	7	30	At Lundye.	
3	8	15	Before the Mars-deepe.	
4	9	0	In the Bay, before S. Poul.	
5	9	45	Without Vshant.	
6	10	30	Before Bordeaux.	
7	11	15	At Blackney and Wels.	
8	12	0	At Hull within the riuer.	
9	12	45	Before Antwerp.	
10	1	30		
11	2	15		
12	3	0		
13	3	45		
14	4	30		
15	5	15		

N.w and S.E. Mone, full Sea.				The Ebbe.
0	0	0	In the Ras of Portland.	
1	9	45	Before the Caskets.	
2	10	30	Before Garnesey.	
3	11	15	Before the Ems.	
4	12	0	Before the Vlie.	
5	12	45	Before S. Helene.	
6	1	30	Vpon the Flakes of the	
7	2	15	Wiering, and Fryssland.	
8	3	0	From Yarmouth, vnto Cromer within the	
9	3	45	bankes.	
10	4	30		
11	5	15		
12	6	0		
13	6	45		
14	7	30		
15	8	15		

S. and by W. Mone, full Sea.				The Ebbe vpon the same point.
0	12	45	Before the Cammer of	From the Ness vnto Wolforts land.
1	1	30	Rye.	From Estaples, vnto Bollayne.
2	2	15	Before Flisshing.	
3	3	0		
4	3	45		
5	4	30		
6	5	15		
7	6	0		
8	6	45		
9	7	30		
10	8	15		
11	9	0		
12	9	45		
13	10	30		
14	11	15		
15	12	0		

S.w. and by W. Mone, full Sea.				The Ebbe.
0	3	45	Before the Garonne or the	From Strusart, vnto Deepe.
1	4	30	Riuer of Bordeaux.	From Cape de Cleere, to Lundye.
2	5	15		From the Lizard, vnto the Start poynt.
3	6	0		
4	6	45		
5	7	30		
6	8	15		
7	9	0		
8	9	45		
9	10	30		
10	11	15		
11	12	0		
12	12	45		
13	13	30		
14	2	15		
15	3	0		

W. and by N. Mone, full Sea.				The Ebbe.
0	6	45	Before Falemouth.	From the Ile of Bas, vnto Marwanen alongst the shoare.
1	7	30	At Plimmouth.	
2	8	15	At Hartlepoole.	
3	9	0	Before Scharborough.	
4	9	45		
5	10	30		
6	11	15		
7	12	0		
8	12	45		
9	1	30		
10	2	15		
11	3	0		
12	3	45		
13	4	30		
14	5	15		
15	6	0		

N. w. and by N. Mone, full Sea.				The Ebbe.
0	9	45	Within the nedles of	
1	10	30	Wight.	
2	11	15	Within the Goude,	
3	12	0		
4	12	45		
5	1	30		
6	2	15		
7	3	0		
8	3	45		
9	4	30		
10	5	15		
11	6	0		
12	6	45		
13	7	30		
14	8	15		
15	9	0		

South

and vvhat houre and minute of the day or night you shall haue full Sea, or falling vvater in all places.

S.S.w Mone, full Sea.				The Ebbe vpon the same point.
0	1	30	Before the Wieling.	From Graueling, to Wolterland.
1	2	15	Before the Mase.	
2	3	0	In the Downes.	
3	3	45	All alongst Beachy.	
4	4	30	At Blackenesse.	
5	5	15	On all the coastes of Zealand.	
6	6	0	At Armuye.	
7	6	45	Before Canfer, or Teruer.	
8	7	30	Under Holy land.	
9	8	15		
10	9	0		
11	9	45		
12	10	30		
13	11	15		
14	12	0		
15	12	45		

W. S.w. Mone full Sea.				The Ebbe.
0	4	30	In the Bresond, and Vourd.	From Oastend to saint Catherins.
1	5	15	At Marie port.	From Dierliet to Strusart.
2	6	0	At Calice within the Creeke.	The Bresont, out and in.
3	6	45	On the West coast of Ireland.	From Cape de Cleere to Saltees.
4	7	30	At Obeurac.	From Lundie, to Milford.
5	8	15	In Mousholе hauen.	From Wales into the chanell of Brustol.
6	9	0	Before the riuer of Humber.	From the Sorlings, to the lands end.
7	9	45		From the Start to Portland.
8	10	30		
9	11	15		
10	12	0		
11	12	45		
12	1	30		
13	2	15		
14	3	0		
15	3	45		

W. N.w. Mone full Sea.				The Ebbe.
0	7	30	Within Portland.	From the Caskets, to Garnsey.
1	8	15	Against the Start.	A quarter of a tyde, within, and without Saint Gylis.
2	9	0	Before Dartmouth.	From Dierliet, to the Seyn head.
3	9	45	Before the Gheest, or in the road within the Ile of Texel.	
4	10	30		
5	11	15	On the Nesse of Wieringhe.	
6	12	0		
7	12	45		
8	1	30		
9	2	15		
10	3	0		
11	3	45		
12	4	30		
13	5	15		
13	6	0		
15	6	45		

N.N.w. Mone full Sea.				The Ebbe.
0	10	30	On the out side of Portland, in the Nesse.	From Blackney, to Cape de Dorsey.
1	11	15	From Deepe, to Bollaine hoare.	Against the Ile of Derdon.
2	12	0	Within the Ile of Wight.	
3	12	45	At Margate.	
4	1	30	At Orford hauen, and at Harwich without the bankes.	
5	2	15		
6	3	0		
7	3	45		
8	4	30	At Lestof.	
9	5	15		
10	6	0		
11	6	45		
12	7	30		
13	8	15		
14	9	0		
15	9	45		

S.w. and by S Mone, full Sea.				The Ebbe vpon the same point.
0	2	15	At Saint Lucas.	A middes the Heads betwæne Douer and Calice.
1	3	0	At Lisborne.	From Dunckercke to Graueling.
2	3	45	At Cales Malis.	From Cane to Estaples.
3	4	30	Before the Condado.	From Deepe to Cane.
4	5	15	Before S. Mathews.	From Bertram to the Caskets.
5	6	0		From Dartmouth to Excester.
6	6	45		
7	7	30		
8	8	15		
9	9	0		
10	9	45		
11	10	30		
12	11	15		
13	12	0		
14	12	45		
15	1	30		

W. and by S. Mone full Sea.				The Ebbe.
0	5	15	Within Falmouth.	From the Ile of Base to Dorsey and the Baye of Cape Cleere.
1	6	0	Within Plimmouth.	From the Sorlings to the Lysard.
2	6	45	Within Dartmouth.	From Portland to the Ile of VVight.
3	7	30	At the Lezard.	From VVight to Beachy.
4	8	15	Before S. Poul.	
5	9	0	Within Garnsey.	
6	9	45	In the Sea of VValles.	
7	10	30	Before Lyn.	
8	11	15		
9	12	0		
10	12	45		
11	1	30		
12	2	15		
13	3	0		
14	3	45		
15	4	30		

N. and by VV. Mone full Sea.				The Ebbe.
0	8	15	On the outside of the Caskets, in the Chanell.	
1	9	0		
2	9	45		
3	10	30		
4	11	15		
5	12	0		
6	12	45		
7	1	30		
8	2	15		
9	3	0		
10	3	45		
11	4	30		
12	5	15		
13	6	0		
14	6	45		
15	7	30		

N. and by w. Mone high water.				The Ebbe.
0	8	15	Within the Cammer.	From S. Mathews to the Fornes.
1	9	0	At VVolfords horne.	From Fontenay to S. Mathews.
2	9	45	In Orford hauen.	
3	10	30	At Rye.	
4	11	15	Within Portesmouth.	
5	12	0		
6	12	45		
7	1	30		
8	2	15		
9	3	0		
10	3	45		
11	4	30		
12	5	15		
13	6	0		
14	6	45		
15	7	30		

EBBES OR FALLING OF *Tydes alongst the coasts of Frisland,* Holland, Zealand, and Flaunders.

FRom Holyland to Bornriff, the flood falleth a quarter of a tide thwart towards the land, a thence E.N.E
From Bornriff to the hookes of Texel, the flood falleth a quarter of a tide thwart towards the land, the rest of the tide falleth — — N.E
From the Hookes to the Maez it falleth a quarter of a tide towards the lande, and the rest of the tide N.N.E
From the Maez to the Caybanck, it falleth the third part of the tide towards the land, the rest — N.E
From the Cay banke to the bankes of Flaunders, it falleth halfe a tide towards the lande, then it turneth reunde with the Moone, and falleth the other quarter E.N.E
Alongst Flaunders coast within the Bankes, it falleth a third part of the tide towardes the land, the rest of the tide falleth — — N.E. and by E.
Without the sayd bankes, it turneth about with the Moone, the other halfe falleth N.E.
Before Graueling and Calice the third part of the tide falleth towardes the land, the rest falleth N.E. and by E. — — —

Falling of Floods and Tides alongst the North coastes of Scotland and England.

FRom the Iles Orcades vnto Leeth in Scotland, the flood falleth alongst the shoare — S. and N.
From the riuer of Leeth to Twed or the riuer of Barwicke, it falleth — — — S.S.E.
From the Twed to Flamborough head S.E. and by E.
From Flamborough to the riuer of Humber, S.S.E.
From Humber vnto Cromer, — S.E.
From Cromer vnto Yarmouth, — — S.S.E.
From Yermouth to Lestoft, at the end of the Holmes, S.S.E.
From Lestoft to Orford hauen it falleth S and N.
From Orford hauen within the bankes called the Spits, by alongst the coast, vnto the Thames. — S. and N.
Neer the Foreland within, and before Margate, and towards the Recoluers, it falleth — E. and w.
At the Foreland on the inside of the Goodwin. S. and N.
From Orford hauen vnto Douer, in the right course, — — — — S. and by E.
And moreouer, aboutes foure leagues N.E. and by E. from the Foreland lieth a banke called Cnock, or Galper, vnto the which banke the floods fall from the North, and from the South alongst the coastes of England, where they meete, and then fall together with a great whorling & noyse ouer the sayd banke towardes the coastes of Flaunders, and therefore is that banke called the Galper. — —
Furthermore, in the North Sea, betweene the Riff and the VVhite Sand, doeth the flood turne with the Moone, and maketh a strong tide there abouts, as likewise vpon the shoald called Brood veerthien.
And in the right course, betweene Holland and England, the streame turneth with the Moone, and falleth halfe the tide to the Seawardes. — —

THE FALLING OF TIDES and flouds alongst the West coastes of England and Ireland.

IN the middest of the Heads or Straict, betweene Douer and Calice, the flood falleth — N.E. and by N.
From the Singles or the Nesse point, vnto the Beachy, it falleth — — — E.N.E.
Before the Seuen Cliffs of the Beachy it falleth E. and by S.
From the Beachy vnto the Ile of VVight. E. and by N.
From the Ile of VVight vnto Portland. E. and by N.
From Portland to the Start poynt. — E.N.E.
And at Portland into the Bay, it falleth — N.E.
Before Exmouth two leagues from land N.N.E.
Before Dartmouth on the land, it falleth N.E. and by N.
From the Start poynt alongst the coast vnto Plimmouth. — — — E.S.E.
From Ramhead poynt vnto Dudman poynt. — E.N.E.
From Dudman poynt vnto the Lyzard poynt. N.E.
In the Channell before Foy, it falleth E. and by N.
From the Lyzard vnto the lands end. — E.S.E.
From the Lyzard to the Sorlinges. — E. and by N.
From the end of Ireland vnto Cape de Cleere. E. and by N.
From Dorsey to the Ile of Blackney. — N.N.w.
From Cape de Cleere to VVaterford. — E.N.E.
From the Iles of Silly, vnto the Ile of Lundy. N.E.
From the Ile of Lundy to the Holmes of Bristol. E.N.E.
Into the Channell of Bristol, it falleth E.N.E.
From Milford hauen to the Ile of Romsie. N.E.
In the Channell of Lundy, it falleth N.E. and by E.
In the Channell of VValles on the backe side of England. — — — E. and w.
Betweene Lundy and Milford, it falleth N.E. and by E.

The falling of Tides and Floodes alongst the coastes of Fraunce and Brytaine.

FRom Blackney to the Oldman, S. and by w.
From Bollaine to Estaples, it falleth — S. and by w.
From Estaples to Deepe, it falleth — S.w. and by S.
From Deepe to Cane in Normandie. S.w. and by S.
From Seyne head vnto Derley, it falleth — w.S.w.
From the Struysart to Deepe, it falleth N.E. and by E.
From Derley to Cape de la Hague, it falleth S.S.E.
From Cape de la Hague to Aldernay. — N.E.
In the Rasse of Blanquert, it falleth — N.E.
From Dierley to the Caskets, it falleth E. and w.
From Garnsey to the Caskets, it falleth a quarter of a tide East, Southeast, and the rest — N.E.
At the Sept Iles, the flood falleth — E. and by S.
From the Sept Iles to S. Pol, alongst the shoare, E. & by S.
From S. Pol to the Fourne, it falleth E. and by S.
From the Fourne to S. Mathews poynct S. and by E.
In the Bresont betweene Vshant and the Seames. E.N.E.
In the Ras of Fontenay, the flood falleth thwart ouer the Rocke called the Empereresse, and maketh a very great noyse and tumbling, on the banke called the Calfe.
Furthermore vpon all the coastes of Poictou, Gascoyne, Biscay, Gallicia, Portugal and Spayne, it falleth alwaies right of and on, to and fro.

Forasmuch

FOrasmuch as of late dayes many skilfull and experienced nauigators, and shipmaisters haue most earnestly trauayled to finde out a sure and perfect way whereby with the help of some certayn signes, or instruments, aswell the Longitude of the place, from East to West, as the Altitude of the Pole betweene South and North might in sayling be secretly known: yet haue brought nothing to light more then what long agoe was well knowne to our auncestors, that is to say: the vse of certaine instrumentes which in this thing are vncertayne, though very good and perfect in that vse to the which they were first made: and seeing that by them all there is not discouered any hidden way in the firmament, by the which the Longitude of the place might certeinly be obserued and vsed, I will not at this time make any mention thereof, but deferre it till a fitter and more commodious time, that I may then discouer to all men what I know therein. Wherefore I would intreate all those that happily might finde this strange, in a matter of such weight and importance not to be greeued thereat, but patiently expect that which remaineth.

An exact description of the depths and soundings neere the diuers prouinces of our nauigation, and first of Gascoigne Poictou and Brittayn.

WIthout Garumna the riuer of Bourdeaux there is 14. fatham depth: but when you come within sight of Cordam tower, but 30. fatham.

Ouer against the coast of Poictou, 16. leagues without Oleron you haue 25. fath. depth: but comming neere the land of Poictou, 8. leagues from the shoare you haue 35. fatham. In the channell betweene Porthuis and Heys, it is 30. fatham deepe: and almuch in the channell of Heys as also betweene Heys and Belile is the same depth. Without the channell it is 35. fatham deepe, but within are 25. fatham onely: without Heys two Kenninges off there is found 45. fatham.

22. Leagues Southwardes of Belile you haue 70. fatham: but nyne leagues from the Northwest point of that Iland towardes the Southwest, is 60. fatham depth. And ouer against the midst of Belile in 40. fatham depth you shall see land. In your course betweene Belile and the Seems, you may come no neere then 50. or 45. fatham. If you sayle from Belile West and by North, when you are against Gloyland, you shall finde 60. fatham depth: without and within the rocke which standes off Gloyland to the sea wardes, you haue 40. fatham water. In 65. fatham depth without the West Penmarques you may saile Northwest and by West without the Seems, but by night come no neerer then in 55. fatham, for the ground is grosse and red sand full of round flints: halfe a league West Southwest of the Seems, is a ledge of rocks, where you haue 7. fatham depth: but betweene the Seems, and the rocks there is 50. fatham water.

In the chanell betweene the Seems & Heisland, called Vshant you haue 55. fath. depth, the ground is grosse red sand mingled with little round stones red and black, neere to Vshant there is 45. fatham, but within it is of an vnequall and variable depth. Southwestwardes almost six leagues off Vshant you haue 70. fatham, and the ground is fine white sand mingled with litle white shelles and other small thinges like needles: and then is Vshant East from you: but if the sand be grosse and white mingled with great and white shels, then is it Southeast to you. But if you doubt of these grounds go Northerly, if your sound be deeper, then you are towardes the Seems: if not so deepe, then are you in the chanell almost North of Vshant.

Betweene vshant and Obeurac in the trade it is 60. fatham deepe: betweene vshant, and the Iles of Silly or forlinges in the midst of the chanell there is 70. fatham depth. If you sayle betweene the Seems, and Vshant in 70. fatham water, the ground will be of little blacke stones easie to be broken, and of yellow earth or clay: but if you finde red and hard sand, goe Northward till you happen on white sand mingled with long strakes: and then without doubt you sayle in the chanell.

If setting from Cizarga, you sayle N. northeastward in the Spanish seas towardes Vshant and finde your selfe in 80. fatham, ye are 14. or 15. leagues off Vshant: but comming neerer you shall haue 70. fatham water, and be 10. leagues distant of Vshant: But if you find the ground to be yellow shels & little black stones, then are you towards the Seems: Wherefore you must with the tide beare off northward,

ward, to shunne Vshant vntill you finde White sand and thinges like needles, for such are the groundes of the channell.

Betweene Vshant and the Ile Base When you sayle at 4. fatham Water you are 4. leagues off the shoare: but by night come no neerer then 25. fatham: When you are two leagues off Obeurac, you shall finde 25. fatham depth: but 8. leagues off the Sept Ilandes you haue 55. fatham.

A league without the rockes of Obeurac there is a blind or hidden rocke. So that if you are to sayle vpon a boord betweene the Fourns and Obeurac, come no neere that blinde rocke, then 40. fatham, but Eastwardes you may sayle in 30. or 25. fatham.

If a ship sayling West Southwest, and Southwest and by West of the Isles of Sylly or Sorlinges, at 80. fatham Water, be found by the crosse staffe or the Astrolabe to be vnder 49. degrees and 15. minutes of Altitude, she is 26. leagues from land, and must goe East and by North till she get 66. fatham Water. For then certenly she is in the chanell betweene the Isles of Sylly and Vshant: and then if she be bound for England she must sayle more Northward, and betweene the lands end and the Lilard she shall haue 55. fatham depth.

A diligent description of the soundinges and groundes betweene Ireland, England, and Normandy.

THree leagues without the Iles of Dorsey vnder Ireland it is 45. fatham deepe. In the chanell betweene Dorsey and Cape cleere is 42. or 43. fatham. The chanell from Cape Cleere to the Islands of Saltees, hath 45. fatham: But two leagues off Ireland it hath but 40. Betweene the Isles of Saltees and Milford it is 44. fatham deepe & betweene Londay and the Isles of Sylly 38. fath. In the mid way betweene the Isles of Sylly and Milford it is 44. fatham deepe: but plaine North of Sylly 40. and 42. fatham. Neere England by the landes ende the channell is of 50. fatham depth.

A ship that commeth from Cape Finisterre sayling North Northeast, if shee hath 80. fatham sounding, she is 20. leagues off the shoare: and the ground is small blacke stones mingled with great red sand. In the same course when you haue but 60. fatham Water, you are within 12. or 14. leagues off the shoare, yet shall you not so soone ken land as you would thinke: for you shall a great while haue 60. fath. depth, for it is at the North partes of the chanell, about the Isles of sylly. Betweene Vshant and the Isles of sylly the chanell is 70. fatham deepe. On the Southside of the Isles of sylly the ground is small red stones and fine White sand. Ouer against the Lizard and Falmouth 4. leagues from shoare it is 52. fatham deepe. Betwixt Foy and Plimmouth sound in the midst of the chanell it is 60. fatham deep. Betweene the Lyzard and the start beare no nearer the shoare then 35. fatham. you maye cast anker in the trade or channell in 25. fatham, and so shall you lie within the foreland streame. Betweene Plimmouth and the Sept Isles in the middest of the chanell it is 55. fatham deepe. But 4. leagues South Southwest of Plimmouth, it is but 35. fatham. South Southeastward of the midland of the start, it is 45. fatham deepe: but from thence 5. or 6. leagues Southeast you haue 54. fatham. In the chanell betweene the Caskets and Portland it is 40. fatham deep: & a league Northward off the Isle of Alderney is a hole or pit 80. fatham deepe: all the rest of the channell betweene Portland and the Isle of Alderney is of equall deapth viz. 40. fatham. When you are within kenning of Portland, your sounding is 34. fatham: and 3. leagues off the Isle of VVight 36. fatham: as also two leagues Eastward of Beachy. Betweene picardie and the Isle of VVight the channell in the middest is 38. fatham deepe. Betweene VVinchelsey and picardy 24. fatham. The shoald betweene the Heads called the Vrowen-sand, hath but three fatham depth and a halfe: but on the Southside of it there is 24. fatham. And in all the faire way betweene Zeland and Douer it is 24. fatham deepe.

A PER-

A PERFECT DESCRIPTION

of the depths of the North Sea from *Englands* foreland.

or the mouth of Flaunders.

IN the chanell and course from Englandes fore-land and sands of Flaunders, you haue 24. fatham depth: but three leagues North-West and by West of the country of Zierickze, there is a shoald commonly called Botbreck, which hath 4. fatham depth. Without this shoald the Chanell of Zealand is 26. fatham deepe. North-West of Harlem, 8. or 9. miles within the sea there beginneth a shelf, commonly called de breede Verthien, reaching alongest the coast of Holland to the playne of Ameland where it endeth. Ouer agaynst Harlem and Egmond is 13. 14. and 15. fatham depth, and the ground is of all Dase mingled with blacke sand like vnto Mustard-seede. The sayd shelfe or shoald, hath 15. 16. or 17. fatham depth, betweene Texel, and Vlieland, where the ground is grosse red sand, 6. or 7. leagues from shoare, for there the shoald is narrower then it is towardes the Southend. The Chanell without the shoald betweene zealand, and Texel is 26. fatham deepe euen as farre as the shoald which the fishers call Doggsant.

In the Channell on England side ouer agaynst Yermouth is 32. fatham depth, but right against Flamborough and Scarborough point 38. fatham whereas the whyte shelf commonly called Doggsant beginneth reaching into the North seas to the chanell of Helichland. This shoald where it is within kenning of Flamborough poynt, hath but 9. or 10. fatham depth: But when in the same sand you find 12. fatham depth: then Texel is from you Southest almost 30. leagues, but when you are come to 16. fatham depth, then are you within 21. leagues South Southeast of Vlieland.

A ship that comes from the Riffe, finding 18. fath. depth on the foresaid sand, is then 20. leagues South and by East of Vlieland: but comming to 22. fatham, must then sayle towardes the Vlie S. and by West Ward, and South southWest-ward. But if in the Chanell of Helichland 24. 26. fatham depth be found, then must you sayle SouthWest, and S.W. and by S. and then are you come to the Scellinghe, but when as in Helichland sound you haue 27. fatham, then are you altogether to the EastWards of it. Betweene the Riffe, & the shoald called Doggersant, the chanell is 26. fath. deepe: Without the chanell WestWards it is 32. fath. deepe. A ship that comes out of the English straightes, or out of zealand, hauing at the riffe 24. fatham depth is distant from the Noes in Norvvay 18. leagues almost North and by East: but hauing 20. fatham is 16. leagues from it NorthWard: and finding but 18. fatham is then 18. leagues off it, North and by West. The course from thence to the Holmes is 12. leagues North and by E. And from thence towards the poynt of Scakghens 18. leagues Northeast and by East. There is a rocke of one onely fatham depth standing Northeast, and Northeast and by East of the Holmes two leagues from the shoare.

The depth of the Northerne Ocean neere vnto Iutland and Ameland.

IN the sea without Iutland a myle distant from Dodenberg there is a banck called Reef-horn, stretching out 8. leagues W. & by S. which in some places hath but three fatham depth, & in some places may be sayled ouer, and become a roade for a NorthWest and a North Winde, in 20. fatham depth. From Ameland towards the sea, the ground is grosse sand, red, and blacke mingled with shelles. From thence sayling SouthWard in 16. fatham three houres, you shall come to the smooth Sea of Ameland, where your ground is fine sand mingled with shelles. North from Schellinghe in 24. fatham depth is found altogether fine white sand, and afterwardes in 18. fatham white and blacke sand mingled. Vlieland hath white sand mingled with shelles, and thinne blacke sand, in 16. fatham depth: from the West end of Vlieland is great & red sand mingled with black

like

like vnto mustardseede, about 6. or 7. leagues from the shoare. At the East ende of schellingh to the seawards at 18. fatham water is found fine White sande mingled with blacke, hauing in it thinges like needles. Ouer against Borckem in the vvester Ems at 17. or 18. fatham depth, land may be seene: the ground is of grosse grauelly sand. At 14. fatham depth may Ameland be kend: but schellingh at 16. fatham: and Vliland at 15. or 16. fatham water. Any man may by night trust to these measures. At the North Hooke of Texel, land may be seene at 16. fatham depth. Holland is seene at 14. or 15. fath. Water When you sayle Within the shoald called the breede Veerthiene, Which begynneth at the NorthWest of Harlem, and stretcheth alongst the coast of Holland to the West ende of Vliland, and is 7. or 8. leagues distant from the shoare.

The soundinges and groundes of Iutland neere the poynt of the Cimbrians commonly called Schagen, or Schaw.

A Great league West and by North from the schavv is 35. fatham depth. North northeast a great league of the corner of this poynt is found 38. fatham depth. And When the poynt is northWest from you, then you haue 17. fatham Water. BetWeene this poynt and Lesou, the chanell is 20. fath. deep, and the ground like clay or dirt. BetWixt Anhout and V Vaersberg in the middest of the Channell is 22. fatham Water. BetWeene Lesou and Anhout the ground is firme and stony: neere V Vaersbergh is a shoald of 17. fatham depth. BetWeene Anhout and Col is another shoald of 17. fatham: Where sometimes it is troublesome like a Whirepoole.

The depths and grounds of the Balthic or Easterne seas.

BEtWeene Oeland and Gothland the soundinges are vnequall sometimes of 20. sometimes of 23. fath. the ground of blacke and stony grosse sand like vnto Peas. VVhen the South end of Oeland is two leagues distant from you Westwardes you haue 27. fatham Water, where also you may commodiously gage Water. But When the chappell in Sudernoorden beareth West NorthWest off you: then haue you 31. fatham depth, and ground fit to gage Water. Ouer against the rocke in the faire way is 52. fatham and a claye ground but fit for gaging. BetWeene the greater and lesser Carla you haue 14. fath. depth vnder Which is safe road for shyps. There is a shoald betWeene Houburg & Ostergard containing 24. fath. depth, the ground is great red sand: but hardly from thence can you ken Gothland out of the top. There is also to the EastWard another shoald of 36. fath. depth, Which When you are past, you haue more then 40. fatham Water. VVhen the poynt of Righ is 3. leagues Southeast from you, then haue you 30. fatham depth: but When it is from you halfe a league South southeasterly you haue 15. fatham: the ground is White sand. But When it beareth West a small league from you, then you shall finde 16. fatham Water. Ouer against Heel halfe a league from the shoare it is almost 32. fatham deepe. The roade for shippes at Heel hath 25. fatham depth. BetWeene Moane and Falsterborn is 14. fatham depth. BetWeene sted and Falsterborn in the very chanell it is but 12. fath. deepe: neere Falsterborn it is full of shoaldes: but neere Sted you haue 13. fatham Water. BetWeene Drakerriff and Southolmen, Which is more shoaldie, there is 5. fatham depth Wanting two foote. From thence towardes the Sound, it is sometime deeper, as 6. 7. 8. 9. or 10. fatham.

A DE-

A DESCRIPTION AND POVR-TRAICT OF THE GREATEST PARTE OF THE *SEACOASTES OF EVROPE.*

FOr asmuch as, these particular *Sea Chartes*, which I haue set foorth of the *Westerne, Eastern* and *Northern Nauigation*, with the rest, which I hope hereafter at the first opportunitie to publish, haue their originall and beginnyng from this generall *Charte* of the *Sea Coasts* of *Europe*: wherin you may playnly perceaue, how the particular Countries are annexed and ioyned eache to other, and euery one of them in his right place, distance, poynt of compas, degrees, minutes. &c. I haue therefore thought necessary to place this generall table (or pourtraict) at the very beginnyng of this booke before all the rest: to th'end, you may thereby the better seeke and finde out the particulars, obseruynge th'order and methode of this booke. Thinkynge it needelesse to make any larger discourse thereof for the vse of Saylyng. Consideryng, that the particular descriptions with their Charts being taken out of this generall and enlarged, do very sufficiētly, teache & shew, bothe the countries themselues, & their commodities (so they be rightly examined) accordyng to the true art of Nauigation, employinge therewithall such necessarie instruments as appertayne therevnto.

A SHORTE INSTRVCTION OF THE FORME AND fashion of Buyes, Beakons, *and other markes, &c. which are set for Shoaldes, Sandes, or hidden Rockes, as they are marked in the particular Chartes of the* Flie-streame, Eemse, Weeser, *the* Elue, Meersdiep, *and the* Mase.

VPpon all the Riuers and Streames of *Holland*, *Friesland*, and *Zeland*, *the* Buyes at the vpper ende are rounde and great, and at the lower end, small and sharpe like vnto this marke 1 being made blacke with Pitche or Tar, lyng for the moste parte vpon the right hande in Saylinge out, & on the lefthand in commyng in: And on th'other side for sandes, flats & shoaldes do commonly stand the Beakons and other higher and more apparant marks made of Dalyers, after this manner, 2 that they may bee the farther of ceaued: And where there is danger of poincts of Rockes, Sandes, & shoaldes, that stande out, there are (that you may shunne them) White Tunnes or Buyes made after this fashion, 3 which do allwayes lie vpon the contrary side of the foresaid black buyes. The eye markes, whereby you may assuredly finde these buyes and other markes, are sufficiētly declared in the description before eache Charte.

But, you must vnderstand that the Buyes and markes are hereun noted, as they weare Anno. 1582. Moreouer because the depthes and channels of the Riuers do yerely shift and chaunge their places, both by reason of the vncertaintie and instabilitie of the sandie groundes, and for that the entringes and mouthes of the Riuers do dayly ware wider & broder: therfore these streames are to be tried by soundyng, and to be sayled in with skilfull and experienced Pilots & maisters. The lande markes placed at the entries of Riuers I haue, for streightnes of roome, marked thus. But where there is saife roade & grounde fit for Ankering, I haue set downe this forme of an Anker. The Figures which are placed in al hauēs Riuers, Streames & Channels, aswell in the mayne seas as elswhere, vpō al the shoales, Sandes & Rockes, do signifie the depth of the places, as 1. 2. 3. 10. 12. Fatham, & so forth: Which is allwaies to be vnderstoode at half flood or ebbe. The litle Crosses marked in this manner † alonge the Coastes neare Islandes and elswhere, betoken hidden and daungerous Rockes, of which you must carefully bewaare: And where the double crosses are, there lye greater Rockes couered with the Water. *These markes in the Chartes are made thus.* ♂. ♀. ♂. ♆. ♁.

Dutche Leagues 15 in a degree
Englishe Leagues 20 in a degree
YSLAND
Grinsa
Wibern
JÆRO
Hitland
Phlo
Pape
Meyland
Hoye
Sande
Labrum
Seeuws
Leeuws
Arag
Yfelt
Arram
Tillinghiade
Detreu
Durgall
Blackenrace
Inescath
Akkyl
Arran
Blakeni
Quelbes
Man
Anglesey
Bendfer
Carmana
Montlaus
Stalmagi
Newgr
Baudes
Milford
Aberdal
Chester
Weral
Ptisin
Ravenglas
Cambris
Anderon
Irwin
S. Lan
Mary Mount
Hollerne
Penick
Calla
Caste
Duberto
Cardigan
Carmarden
Tenbyer
Caldey
Oxford
Lincolne
Lichfeld
Cestria
Flamborough
Yorke
Hull
Lincolne
Lin
Boston
Lincolne
Lin
Norwich
Yarmouth
Lestoffe
Ipswich
Harwich
Colchester
Maldon
Londen
Canterbury
Dover
Calis
Gravelin
Bolloigne
Depe
Fecamp
Diepe
Caux
Hauen
Honfleur
Caen
Cherbourg
Barfleur
Cotentin
Vallonia
Cales
Mare
Witte banck
Vuntziers
Schurmans
Ter Schelling
Ter Vlie
Ter Ghoes
Ter Heyde
Ter Mase
Ter Goude
Ter Tolen
Ter Veere
Ter Vlissingen
Ter Sluys
Ter Gant
Ter Hont
Ter Mude
Ter Ysse
Ter Ysse Mont
Ter Ysse Mont
Ter Ysse Mont

MARE HISPANICVM
FRANCIA
GASCONIA
BORDEAVX
BISCAIA
GALICIA
CATALONIA
HISPANIA
PORTVGALIA
LISBONA
ANDALVSIA
MARE MEDITERRANEVM
BARBARIA
AFRICA
ITALIA
VENETIA
ROMA
CORSICA
SARDINEA
SICILIA
TVRKIA
Spanishe Leagues 17½ in a degree
Dutch Leagues 15 in a degree
Judocus Hondius fe
MAL Y PENSE

Dutche Leagues 15 in a degree
Finmarken
Wsterbol
Loffoet
Sanian
Fromsont
Sidyrni

A TRVE DESCRIPTION OF THE *VLIE* AND THE *MARSDEEP*, TWO OF the notableſt Riuers of all *Holland*, from the Northern vnto *the Southerne ſea*.

HE that will ſayle from the North ſea vp to *Amſterdam*, or *Enchuiſen*, by the entrie of the *VLIE*, commonly called Noordergat, muſt ſo direct his courſe that the Lande-marke of Schelling may exactly anſwere to the thꝛee Downes, and the Blacke downe, muſt be directly oppoſite to the middeſt of the high White downe. Then appeareth the firſt Buy, from which he ſhall ſayle vnto the ſeconde South and by Eaſt, oꝛ South and by Weſt: accoꝛding as the winde and tide will ſerue. From thence vntill he come to the Buy, which lieth vpon the Buske. South and by Weſt, oꝛ South, ſtill carefully obſeruing your tyde. From thence let him ſayle vnto the Buye in Monckſloot, South, oꝛ Southe and by Weſt: thence to Longſand, South and by Eaſt: then to Wolfſhouk ſouth eaſt and by South, but till he come to Caſhoucke, let him kẽpe ſouth ſouth eaſt.

The eye marke of Caſhoucke is, when the Towꝛe of Franike appeareth neare the hauen of Harling. From Caſhouck vnto Schutſande, the courſe is Eaſt ſouth eaſt, the markes wherof are theſe, viz. That Cornwerde on the Eaſt ſide is right oppoſite to Bolſwerde, and Winald is diſcerned aboue the Caſtle of Harling. From Schutſand he muſt ſayle to Swaenbalg South eaſt, where the Buye lieth with theſe markes. viz. When Boldeſwerde appeareth on the Eaſt ſide of the bꝛoade tower, oꝛ the high buildynge, on the Southſide of Cornewerde: But when Bolſwerde is perceaued betwæn Deſtin and Cornewerd, then may he plie that reache vp oꝛ downe at his pleaſure. From Swaenbalg he may paſſe to Middleground South ſouth eaſt. & the markes hereof are: when the two picked ſteꝑples of Harlynge on the Southſide, are right againſt two other Towers on the Noꝛthſide. The way from Middlegrounde vnto Idelhooeck, and the Weſt of Worcum lieth Southward, and then Coldum ſheweth it ſelfe on the South end of Himlopen, which is the marke foꝛ the Buye of Weſt Worcum: From thence vnto the Buye that leadeth to Bocht South ſouth eaſt, where Pandagra appeareth ſtandynge at the Southſide of Volwerd in a valley: & when you ſhall perceaue Pandagra neare the houſes, kẽpe the right foꝛme of the Towꝛer in your ſight, vntill you come to the Buye, that lieth vpon the flat of Freiſlande: there is dæpe water, & that reache ſtretcheth. South Southweſt: From thence to Creile South and by Weſt, the markes wherof are, when Mirnys toucheth the South partes of the Cliffe, and the Cozne milles appeare on the Weſtſide of Medenblicke. The way from Creyl to Crepelſand is South ſouth eaſt, and South eaſt and by Eaſt, the markes of the Buye of Crepleſand are Enchuiſen ſtanding by Venhuyſen and Broocke nigh vnto Hem: From hence you may ſayle vnto the firſt Buye in Hillegat, South ſouth eaſt, and South and by Eaſt, and then vp towardes the Beacon, South and by Eaſt, but from the innermoſt Buye vnto the Road of Enchuiſen, South and by Weſt.

Moꝛeouer ſayling from Enchuiſen to Texel, he muſt (as the winde and tide ſuffer) beginne his courſe, from the Buye that is Noꝛthward in the goyng foꝛth, (commonly called Noordergat) Noꝛth noꝛth weſt, oꝛ Noꝛth and by Weſt, vntill Brooke may be kenned neare Hem, where he ſhall finde the Buye of Crepleſand. From thence he ſhall go to the Wicker marke oꝛ Beacon of the ſayd Crepleſand Noꝛthweſt, and when Lytebrooke is ſeen neare Hem, he ſhall finde out this marke: From whence he may ſayle vnto the South Buye vpon the Flats of Wiring, Noꝛth weſt and by Weſt, hauing regarde to the winde and tide. This Buye is knowne when the Twiſch by Almerdorpe and Brooke do ſhew betwæn two Heyꝛickes, and the Weſterne tower of Wiringe perceaued neare vnto the houſes. Then he may paſſe towardes the middle Buye Noꝛthweſt and by Noꝛth, vntill he finde that the Winde mill of Wyringe ſtandeth at the Southende of the houſes that are out of the towne. From the middle Buye vnto the Noꝛthern, wee ſayle Noꝛth noꝛthweſt, the markes are, when the two piked Steꝑples are one: and on the Eaſt ſide of the Buye there is a dæpe Pole ſit foꝛ great Shippes: from thence he may ſayle to Vlieter, Noꝛth noꝛthweſt, and Noꝛth and by weſt, kẽpyng Medenbliche, and the Buye in one, ſo longe as he can ſee them, and kẽpe ſtill his courſe North and by Weſt, vntill he come to Neſſe, where he ſhall finde a Buye on the Eaſtſide, and there ouer againſt ſtandeth a marke made of Wicker oꝛ Baſket woꝛke vpon the Neſſe: the tokens whereof are, when the Mill vppon the ſhoare is oppoſite to ẏ vally, which is vpon the Weſt ſide of the ſhoare, and the tower ſtandyng towardes the weſt, ioyneth to the Weſt parte of the houſes. From thence to Vogelſand, Weſt noꝛth weſt, ſometimes windyng about. But when he commeth neare Vogelſand, let him take hæde, that Horn tower in Texel may be ſeene neare the houſes which ſtande vnder Geeſt, and kẽpe them ſo in ſight vntill he come to the Marchants Roade. there may he Anker beſoꝛe Geeſt in Texel, where he ſhall thinke beſt. But if he will fourth into the Ocean, his courſe is to the New Deepe, and ſhunne the Shoaldes of Geeſt, two Gables length from the ſhoare ſide of Huiſdune, vntill he come to the ſhoalde called Dry Hake, and kẽpe the ſhoare markes which ſtande vppon Huiſdune fiue ſoote one from the other. Then muſt he holde on his courſe to the Sea, by the entrie oꝛ channell of Marsdiep, commonly called Spaignarsgat: foꝛ Reylars plat hath two Fadam water at halfe floud, ſo that the ſayd ſhoare markes may be almoſt ioyned together.

And if comming from the Sea, he would beare in with the entrie of Marſdiep, called Spaignarsgat, he muſt ſet Wammes oꝛ S. Johns tower on the Noꝛthſide of the high Downe of Texel, and the Landmarkes vppon Huiſdune, the diſtance of 5. foote from eache other, which beyng ſo ſet, and kept, he may enter ẏ chanell. But if he will enter the mouthe of Maerſdeep called Dorley, let him kẽpe the Landmarke and the Spere ſteꝑple of Texell a Sayle breadth a ſunder, and let him holde on his courſe vntill the Landmarkes of Huiſdune appeare fiue foote eache from the other, ſaylyng Eaſt and by ſouth towardes Huiſdune. If he will go in at the entrie called Ebbe gat, let him kẽpe likewiſe the foꝛeſayd markes of Dorley, fiue foote a ſunder. But if you will ſayle in at Lantdiep, called Swidergat: ſet the Churche of Geeſt euen with the ſhoare of Huiſdune, and ſo enter. Afterwardes let him kẽpe along the ſhoare of Huiſdune, about the length of two Cables of: vntill he haue paſſed the New Deepe, then let him conde the ſhip Northeaſt, vntil he come to the Roade where great ſhippes and Hupes lie neare to Geeſt in Texell, where he may caſt Anker in. 10. oꝛ 12. fatham.

It would be to tedious to ſet downe all the Trades and Traffique of all the cities and Townes vpon this South ſea: notwithſtandyng I will touche it in few woꝛdes: There is Amſterdam that moſt renowmed Marte towne, which in all Europe hath not her pere, foꝛ varietie and plentie of all Trades, eſpecially of all kinde of Caſterne and Noꝛthern commodities, Wares and Marchandizes, and aboundance of Factoꝛs.

There ſtandeth likewiſe vpon this Sea the famous citie of Enchuiſen: where ſuch aboundance of Hering is taken, not farre from the towne, at ſometimes of the yere in this South ſea, as ſuffiſeth (as may be dayly ſeene by experience) at one time to fraught many Hupes, Boates and Pinckes foꝛ marchandize vp thꝛough all the Maze, whereof ſome are dꝛied oꝛ ſmoked, called Tybucking, eſpecially about Chriſtide, which are accompted dayntyes amonge noble men, and are vſed foꝛ Newyeares giftes to the better ſoꝛte. But thoſe that wee do call Marche hearyng are not ſo good, notwithſtandinge great plentie of them is carted vp the Riuer of Elue into Germanie, Boheme, Hungarie, and further downe the Riuer of Danube towardes Turkie oꝛ the leſſer *ASIA* where the ſame are ſolde, ſpente, and greatly accounted of.

And *HORNE* that noble citie is ſeated towardes that South ſea, where beſides the Traffique on the Seas, the Countrie yéldeth ſuch ſtoare and plentie of the beſt chæſe and Butter, that it is rather to be wondꝛed at, then to be written of, which all Germanie, Brabant, Spayne, and many other countries can ſufficiently teſtifie.

THE SOUTH
The figure & appearing of the Iles that are sett downe heere under neath, when you sayle there alongst, a League, or trooc from them.
Amelandt
Der Schelling
S. Brandares
Veenhuysen
Lemmerhorn
Tval vā Vrck
Vrck
toosteynde
Vlielandt
tvvesteynde
De hauen
Kuyder
Sloeten
Marden
Balck
Reuel sant
Docuc sant
Thur doeth Frysland Sheuve hit selfe, as heere under is sett downe, when the bekone that standeth vppon Schiermonnickooch doeth comme East South East from you a League off. Sec. 23. 2.
Sneeck
Ilst
Oldega
Abbega
Hoscle
Bolstraert
Hiechten
Groutorp
Exmorn
WEST VRIESLAND
Wyer
S Iacob
Aengum
Ridt
Schaltum
Franicker
Witmersū
Kuitsmert
Arū
Sirdtgum
Lidtlum
Buer
Doegum
Oostbierum
Timarum
Midlum
Sexbierum
Pietersbierū
Wīnaldū
Harlingen
Syrck
Spange
Opt Watt
Cromme balch
Amelandt
Ballum
Den Abt
Bossant
Born diep
Born rif
Amelandergat
Coggen diep
Der Schelling
Horn
S brandari
Midlant
Suryp
Grint
Hobbe sant
Noordergat
Rans diep
Tolie
Vlielant
Westende
Oosten
Texel
Horne
Robbe sant
De Pan
Tever sant
Vriese Ree
Monckesloot
Schiermonnick
Hoge
Middel gront
Coruer baken
Schuyt sant
Stuyn sant
Dyckeringh
Kaes houck
Lange sant
Schierlings hal
De Nes
Vliest
Byes sandt
De gantis
Suyghorn
Wieringe
Doeuer
Repel
Voegel sant
De boss
De Waert
Noord haken
Spaniaers
Hille gatt
De Kil
Groepel sant
Kriel
Place
De straet
De bocht
Ilst
Ilst
Ilst

Thus doeth sherbe or appeare Texel, when it is three Leagues from you East and by North
Thus appeareth Huysduynen, when it is three leagues from you East South East
Thus appeareth the Ooch when it lyeth thwart from you twoo Leagues
Thus appeareth Camperduyn & Egmont uppon the Sea when you sayle a longst before it
A Description of the twoo famous Riuers Streames or Channells the Flie & the Maesdeepe streaching up in to the Swther sea before Enchuysen unto Amstredam. wyth all the sandes bankes an Showldes, lying uppon the sayde streames
Oude Naerden
Naerden
Muyderberch
Muyder sand
Muyden
Pampous
Marcke
Thoornicker hop
Goudt zee
Vdam
Rarop
Monckedam
Brouck
Galileen
Catwout
Edam
Wynes
Oetersem
Scelling hout
Hoorn
Sardam
De Purmer
Lantsmoer
Vlpendam
Purmerlantt
Quadijck
Purmerent
Beets
De Beemster
Wormer
Berckbout
Benninck brouc
Wadrwey
Auen horn
Schermer horn
Ryp
Schermer Graft
Vrsem
Opdam
Op meer
Oosthuse
Oosdane
Zaerdam
Purmer Veer
Westzane
Aßendelft
Crommenier
De Schermer
Oterleck
De Waert
Ackersloot
Brouck
Outdorp
out carspel
Abbenborch
Alckmaer
Hello
Limmen
Koedijck
Wthgeest
Beuerwijck
Warmhuysen
Haring carspel
Abdie
Egmont
Egmont op zee
Crabbendam
Camper duyn
Petten
Amstelredam
Sloterdijck
Thuys ter hart
Sparendam
Sparenwou
Velsen
Schoeten
Cleef
Santpoort
Castricum
Wijck op zee
Leemuyen
Noordā
Braſen meer
Haerlemmer meer
de ton
Heemstee
Haerlem
Berckenrode
Hilgont
Waterige
Kaech
Lis
Saſſen
Teilingen
Voorhout
Santfoort
Noortwijck
Noortwyckerhout
Cattwijck
R N SEA

(RPJCB)

A TRVE DESCRIPTION AND POVRTRAICT OF THE MAZE, TOGETHER with the entries of the *Goer* in *South Holland*, and the *Vere* in Zealand, and also of the *Wielinghe*.

FIrst if you will finde out the right depth or channell of the *Maze*, set the Tower of the Bryll, South east and by east from you, and saile on so vntill on the Larboorde Haghe steeple appeare as within two masts length wide of the South side of the square tower of Mounster, and on the Starreboord the watch-tower of Eastuoren be brought to the West end of the towne. These are the markes of the South entrie, commonly called the Suidergate, and there shall you finde the vttermost or first buye. The entries which lie neere the Bryll by the shoaldes of the Dary or Botkill, are at this day commodious: For there are buyes fastened, & then the Brill beareth nearehand South-east from you. Then must you saile to the poynt neer the Bulwarke from buy to buy, euen till you come to the Brill, where along the shoare about a Cables length off, is good roade and harborough vnto the olde Maze. Thence you crosse ouer by the Breach, called the Sceur, the markes for it are when Couwerscie, and the trees are come togither. Thence must you saile vp to Roterdam in the midst of the Channell.

But to enter the Goer, set Goer steeple West off the watchtower: set small saile along the shoare a while, vntill you are past the watchtower, shunning the point, least you strike on the start, or taile sand, that stretcheth downe from the landes. Then bring the Windmill which standeth in the Oelkens platt, 5. foote distant Northward from Diricsland tower, & enter the porte of Goer, where in the Channell you shall anker at 6. or 7. fatham.

But if you will goe into Brouwerisgate, and goe cleare of the shoalde called Drooghericke, which stretcheth downe from Goer, take heed that the land markes of Schowen (called Zerickisea) do ioyne togither, vntill Outgetherdorpe be ioyned with Goer steeple. Then without regard of the shoare markes, keepe these towers ioyned together, till the land marke be one with the Downe, which commonly is called white Blencke, or Lange witte sand. Then with all speed leaue the sayd towers because of the Scere which reacheth from the farthest partes of Goer, for the tide setteth so strongly between Droogerecke and Scere, that it would with his violence carry the ship vpon the saple of the Scere. Wherefore bearing on as neare the shoare of Zieriesea, as you can, you shall come to Brouwershaven, where you may anker at 7. or 8. fatham.

But if you will enter the Vere, see that East Caple may be right against Middleborough South-east from you, & so saile vp vntil you haue brought the steeples of Cortigien in one, then set forwardes by Polder, alias the Hooke, & when you are past the same, passe on to VValcheren sailing still near the bank vntil you come to Teruere.

To saile into Dorley, bring the tower of Flushing East and by South, and VVulpen East South East, and so crosse ouer Dorley, for it is there deepe and broad. The true markes where of are when East Souburge standeth distant almost one pace Northward from VVest Souburge: those keepe in the same distance, vntill the steeples of Bruges alias Brugghellingh be brought togither: for there it is three fatham deepe, but it is requisite that the steeples of the two Souburges doe shut and open, and that Flushing be East and by South from you, and so hold on the Dorley.

If you will enter the VVielinghe bring Terdoes Church distant from the West end of the steeple of Liswegen a ships length, which you must so keepe vntill west-caple appeareth at the East end of the Church of Heist. For when Terdoes Church is brought one with Liswegen you are within the entrie of the VVielinge. Then keepe the Tower which is on the East side of Heist a ships length off, vntill you shall haue six fatham water: Then let the little tower of Blanckenberge alias t'Hauentorenken be brought one with the watch tower of Blankenberge, before the light tower of Hiest, be one with the steeple of Heist, then shall you be cleare of the Pol. Therfore entering ỹ VVielings let the little Tower of Blankenberge (as I haue sayd) first touch the watch tower, before Heist be one with his Lanterne: saile then East North east, bearing somewhat towards the East, and keepe Blankenbergs watch tower betweene the sayd little tower and the towne house, and so haue you the best of the Chanell. But when you shall see on the starboord side the Tower of VVotkirke 2. sayles breadth south from the Northerne Tower, and right before you another Tower distant the space of 5. foot Northwarde from the steeple of the Abbey of Middleborough, then haue you the right marks to saile thorough the VVieling, as long as you can see the sayd steeple: but hauing lost the sight thereof Sainct Lambertes steeple sheweth it selfe in a valley at the East side of Catsand, which are the sure markes to saple into the deepe: and when you shall haue gone so farre that the watch tower of Blankenberge appeareth betweene the little tower of the same and the Towne-house, then haue you gotten the right course: Then bring the Lanterne of Heist to his steeple before the watch tower of Blankenberge be ioyned to the little tower of the same, and you shall goe cleare of the sands called the French Pole. But if all the aforesayd markes at one selfe time come togither, you shal run right vppon it, where there is but the depth of one fatham: yet notwithstanding in calme weather a ship ỹ draweth 18. foote water may at halfe flood passe ouer the sands called the Caybanke. And if any man entering the VVieling will goe out by Dorley, he must keepe VVest-caple and Cnock distant a saples breadth, and must saple North-west vntill the steeples of Souburge be seperate fiue foote a sunder: then set West North-west vntill you haue Flushing East and by South, and so shall you not endaunger your selfe vpon the shoalds. There are shoaldes in the inner part of VVielinge commonly called the Vlack vanne gatt. When the watche tower of Blankenberge is one with the Towne house, you are then past them. But when you haue gotten ten fatham, saple towardes Flushing two Cables distant from the shoare of VValkeren, vntil you come to the castle of Ramekens: but take heede you be not carried with the swift tide vppon Natgat, where it sets inward with great violence.

The traffique and Merchandizes of this part of Zealand cannot easely be described, not withstanding there is in Brabant vpon the Scheld, the citie of Antwerp, sometimes the most famous mart towne in al the world, where there was great plentie & aboundance of all nations, and of all pretious commodities which were brought thither from Spayne, and other Countreyes in great ships and hulkes. Besides there is in Zealand an Iland called VValkeren, where the famous marte towne of Middleborough is situate, whither all kinde of French and Spanish wines, being brought in great aboundance, are there sold and vented. There is also within that Ile a litle town called Armu, where the course bay salt which is brought thither in great quantities frō France and Spain, is purified, and made white, and from thence is transported and dispersed throughout all Europe.

And Roterdam standeth vpon the Maze, where there is great store of little ships, and boates called Buisen and Pincken, and much traffique and entercourse of marchaunts for pickell herring.

Biesbosch
Opt Landt
Merwen
Dordrecht
Papendrecht
Alblas
De Leck R.
Gelcy Roo vaert
Leghe Swaluwe
Moerdijck
Seuen Berghen
Clujnder
Stantlaer buijten
Finaert
Oudenbosch
Steenbergē
Berghen op Zoom
Boemkrieck
Romerswael
Tolen
Scakerloo
Westkerck
S Martens dijc
Philip lant
Antwerpen lant
Cloetinghen
Suyt Beuela
ter Goes
Bieselingh
Burglant
Wolphaerts dijck
Vianen
Duuelandt
Voort Benedict Caerspl
Gorcum
Zierickzee
Bommene
Tland vā Schouwen
Bronwershauen
Onsevoren
Scheur
Goere Outdorp
Brouwers gat
Tgoerefgat
Hoghland
Bargat
Vlissingh
Polder
Dort
Ouer
Oudetonge
Stadt Flac
Nieuwe tonghe
Middelbornis Sommerdijc
Quc
Direxlant
Herkinghe
Oeltgens plaet
Ruymoor
Zype
Flacktee
Beierlant
Putte
Spijkenisse
Geerulier
Coorndijck
Bleijnckulier
Heenuliet
Tlandt
Swaerte nael
Heluoeten
Briel
van Voorn
Oost voorn
Nesse
Dit maes
De Oude maes
Gatgens
Strijen
Pietershoeck
Chillershoech
Westmaes
Iselmondt
Rijnsboeck
Rijderherck
Swijndrecht
Capelle
Tveer
Honinghen
Rotterdam
Charloes
Roon
Portugal
Perniß
Delfshauen
Ouerschie
Schiedam
Vlaerdinghen
HOLLAN
DIÆ
Maeslandts sluijs
Sgrauen haghe
Scheuerlinghe
PARS
Sgraue sande
Monster
Ter heijde
Texel
Vlie
Holm
Die dary
Vlieuwe gatt
Texelsche gatt
Vlie gatt
Vlieborch
Vlieland
Vlie
MARIS SEPTENTR
Inglishe leagues 20 in a degree
Spaniſhe leagues 17 ½ in a degree
Dutche leagues 15 in a degree
N

Haerlem
Thus Appeareth Southholland betweene Harlem and Scheuelinge, when you sayle there alongst
Santvoort
Noortwijck
Catwijck
Scheuelinghe
The land betweene Scheuelinghe and the Mase
Doel
Scheuelinghe
Ter heyde
Monster
Sgrauesande
Appearing of the land of Foor whē you bee before the Mase
The land of Schouwē when it lyeth right before you
Briel
Oostcoorn
COMITA TVS
FLAN DRI=
Æ
A Description of the Iles of Sealand as they lie vpon all ye Riuers & Chanells with a part of the sea Coastes of Holland and Flaundres.
Damme
Brugghe
Aßene
Nijerhauen
Oostburgh
Sluijs
West capelle
Ter Does
Cadsand
Nuyen
Knock Heyst
Lißmeghen
Wthkercke
Blanckenberch
Windwijn
Wackerhout
Oostende
S. Catrin
Middelkerck
Lombaert syde
Nieuport
PARS
IONALIS PARS
Broers banck

A PERFECT DESCRIPTION OF THE SEA COASTES OF FLANDERS WITHALL THE SANDES, FLATS, BANCKS AND SHOALDS THEREOF.

WHen you sayle out of the *Wielinge* towards the straights between *Callis* and *Douer*, called the *Heads*, you must bring the watch towre of *Blanckenberge* one with the steeple thereof, and then *Westcappel*, ioignes with the Lantern of *Heyst*. But when *Lisweghen* is brought one with *Terdoes churche*, then are you in the mouth of the *Wielynge*: holde then West southWest, bearing a little West and by north: then haue you the true depth in 6. fatham water at halfe floud.

Or els you may take this course to saile thorough the *Wielinge*, your leading mark is to keepe *Middleborough* steeple a little sayle breadth open to the south wardes of the watch tower, and so sayle West southWest vpon that marke as farre as you can see it, that being out of sight, go West southWest and borow of either side at your best aduantage, as the winde serueth, vntill *Blanckenbourgh* be south southeast from you, then go West vpon the floud and West southWest vpon the ebbe, till you be in 12. fatham, then shape your course, for you are cleere.

There lieth neare *Blankenberge* a long bancke called *Witsand*, stretching along the shore vnto *Winduyn*. It chanceth that mariners are here often deceaued, who reckoning themselues to be entered the *wielinge* are shut vp betwixt the same & the shore: wherfore if they that come in from the sea would shun this banke, let them set the broad steeple of *Liswegen* eastward therof, and so bearing along the shoare in 6. fatham water they shall goe cleere of it.

When *Wotkerke* is one with *Blankenberge*: and *S. Catalina* shuts into *Ostend*, you are then before the mouth of the *wielinge*: but when the steeple of *Ostend* is one with *S. Catherins* then you runne vpon the shallow called *Trix*, which allwaies turneth about in maner of a whirlpoole by reason of the violent meeting of sundrie currents and tides: and there you haue 5. fatham water. Ouer against Ostend there lieth a banke of sand a dutch mile from the town, called the old *Morebank* hauinge 2. fadam water at the lowest ebbe: There is also another lyeng West and by north of *Ostend* called *Dijestall*, that at the greatest ebbe hath 3. fatham water.

Moreouer when the *Downe Friery* called the *Broers* standeth south from you, you are within the *Broers* banke: But when *Dunkerke* beareth south and by West from you, you are past the most daungerous and vttermost part of this banke. There standeth an high and ragged downe West of *Newporte*, ouer against which this banke hath hys beginning which reacheth fower dutch leagues north northWest into the sea, and doth lie from *Newport* northWest, but when you haue *Newporte* southeast and by south, you are past the banke.

There are also two or three dangerous bankes, northWest, and northWest and by West from *Dunkerk*, the first lieth from the shoare two dutch myles, and the other three. The middest is called *Polder van-dijckt*: But that which is called *Ruting*: is most dangerous for that it lieth in the fayre way and in the very entrie of the Channell. Either of them hath 2. fatham at low water, which you must warily passe by.

There are also two other Banks north West and by north from *Dunkerke*, almost ii. dutch myles distant from the shoare, wherof one is called *Driftall*, the other *Quaebanck*, which at lowest water are but 2. fatham and an halfe: you may safely sayle along the coastes of Flaunders, betweene the shoare and the shoaldes at 5. or 6. fatham, but it is daungerous for great vessels because the waues both in ebbing and flowing doe for the most part set thwart ouer the shoaldes.

North northeast from *Callis* cliffe, three dutch myles from the shoare lyeth another shoald which at lowe water hath 3. fatham. There lieth also an other Bancke or shoald of the same depth almost two dutch myles from *Graueling*.

There is safe roade and harborowe vnder the tower called the *Oldman* for a north winde, where you haue 7. or 8. fatham.

In the verie middest of the streightes there lieth a shoald 4. fathams deepe: of which both by south and by north there are 20. and 22. fatham: Right before the entrie of the riuer of *Some* two dutch myles into the sea it is not past 5. or 6. fatham deep.

He that will saile to *Deepe*, setting out from the tower called the *Oldman*, must goe forth south southWest, so shal he arriue to the entrie of *Deep*: at the very mouth therof on the Larboord are marks made of Dasiers but it must be halfe floude before a great ship be able to come in.

Thus doeth appeare the land or Coaste of Calis when you comme out of the west for to goe thorough
Cales diff
or straight betweene Douer and Calis
Swartenes
Appearing or opening of the lande or Coastes betweene Nerveport and Cales when you cõme out or from the
Nieupoort
Soutkueten
Duijnkercke
Greuelingen
Calis
FLANDRIÆ PARS
Nieupoort
Lieurowtonduijn
Soutkueten
Duijnkercke
Driestal
Greuelingen
Calis
Swartenes
PICARD
PARS
Broers banck
Quae banck
Polder
Ruijting
THE
THE NORTHERN SEA
Englishe Leagues 20 in a degree
Spanishe Leagues 17 ½ in a degree
Dutche Leagues 15 in a degree
Goeijngh
Douer
The downes
Dat duits
ANGLI

NORMANDIÆ PARS
Eu
Crotoy
Somme flu
S. Valery
Aussy
Treport
Oreille
Diepe
Varengen
Monstreul
S. Iosse
Estaples
A Description of the
Sea Coastes of Flaundres
& Picardie beginning from
Nieuport vnto Deepe, w^ch the
Flemmishe bankes, vntill you
be past the straight betweene
England & Fraunce the w^ch
is called the heades
MERIDIES
HEADS
OCCIDENS
Smak
Rumney
Rye
Fierley
Winchelsey
A R S

RPJCB

A PERFECT DESCRIPTION

OF THE ISLES OF ALDERNEY, GARNZEY AND *IERZEY, AND THE QVASKETTES CALLED* the Kaskets, together with all the coasts, rocks, and shoalds, *lying thereabouts both within and without.*

HEcam beareth westward from Deepe 7. leagues, and is a bard hauen: Beyond it lieth the point of Strusard, from whence you may sayle to Seyne head S. S. W. Newhauen (called Hable-neuf) standeth inwarde from thence halfe a league, where you may anker, to stay for the tide and sayle vp the Seyne to Roane, so that before the tide be vnbent you passe ouer the first traues or Drybancks: and the way from Newhauen to Honfleur lieth S. E. But you must sayle along the south shoare, because the north side of the riuer to Quillebeuf is ful of shoaldes, and then are you thorow the first traues: But you must be very heedfull of that strong spring of the Sea (called the Barre or beare) in which the tide setteth so violently and swiftly, that a ship can scarse be kept vp with all her ankers and cables. But all this reach is to be sounded.

South West of Seyne head lyeth a banke of three fatham: and before the dike of Cadom (called the Fosse of Caen) there are bankes, which you may sayle round abouts by the channell of Caen, which is a bard hauen.

Six leagues or thereaboutes towardes the West, standeth the Cape of Cherbourge where for a rough north West winde is good harbour: there lye sands ouerthwart the bay, which at low water haue but two fatham depth.

Agaynst a north and north West winde you may safely anker vnder Alderney by the little bard hauen, in a sandy bay hard abourd the shoare: where it is 7. or 8. fatham deepe.

If you will enter the race of Blancquerd, you may runne in, eyther in the midst of the channell, or at your discretion betweene the cape of Haghe, and Alderney: for you may borow the north shoare alongst vpon 10. or 12. fatham, vntill you are past the Sans, which is a row or ledge of hidden rockes, to be left on the starreboord: there cast anker in the channell at 7. or 8. fatham, and against the broad tower. The race of Blanquerd reacheth inwardly south and by east, and south south east: But if you will sayle on the backside of the great Isle of Iersey, you must crosse ouer, and anker vnder the same where you please for in euery place thereaboutes is good ground.

And there is an other safe road for ships, vnder the main of Saint Malo (called Conkall) you may sayle into the same both by East and West: before it lieth a ledge of rockes aboue water. The bay is great and the harbour safe, hauing at lowe water 4. or 5. fatham. From this roade you may descrie the Isle of Ierzey right ouer against the same, almost 5. dutch myles off.

But, if by reason of a north West tempest, you are driuen to seeke safe ankering vnder Garnezey, or elswhere, you must set for Garnezey or the little Isle of Arme, auoyding on the West side the great rockes of the Quasquettes (called the Kaskets) sayling south and by east vntil the castle which standeth in the sea be brought to the south poynt of Garnezey. Then saile betweene the greater and the lesser Island, where you may anker by south or by north from the castle, where you please, in 7. or 8 fathams. But if you will anker at the south side of the sayd Island, beare aloofe to sea-ward from the outmost poynt of the land, because all that shoare is full of rockes: after you haue doubled that poynt you may anker at 12. or 14. fatham: you may goe out againe East ward betweene the Iles Arme and Sarke, or seeke there for roade as you list. Sarke standeth from the Cape of the Haghe, or the trade of Alderney, 6. dutch leagues south and by West.

Although these Illandes lye neere the coastes of Fraunce they are notwithstanding subiect to the Crowne and gouernement of England: their trade is little or nothing at all, and therefore vnknowne to vs.

The Appearing of Aldernex or Ornay when you goe by alongst the coast
The Ile of Garnsey when it is right ouer against you, twoo leagues of
Auxentie
NORMAN
Caen
A CARDE of parte of the Sea Coastes of Normandie and Britanie with the Islands adioyninge.
S. Saueur
S. Saluator
De Eosse vā
Caen
Honfleur
Baieux
Vile luil
Seyne fluuius
Quarentin
Rettiers
MARE
Hableual
Seyn Hooft
Quareme
Fecam
Strusfaert
Honge
NORMANDI
English leagues 20 in a Degree
Spanish leagues 17 in a Degree
Dutche leagues 15 in a Degree

Cancalla
Dinant
Rio
BRITANIÆ
S Seledor
PARS
S Michiel
S Mala
S Brieux
C de late
Porto riaux
Banck
MARE
West
North
BRITANNICVM
Roketurves
S. Catrina
S Hilari
IERZEY
Tholants bay
Montor guiel
Sans
SARCK
Cornet
GARNZEY
Dierliet
C. de la hague
ALDERNEY
Barroch
Quasquettes
Quasquettes

KPJCB

A PERFECT DESCRIPTION

OF THE SEA COASTES BETWEEN *S.MALO, AND BEYOND THE PORTE* OF ROSCOVV.

IF you come from the Westerne sea, and seeke harbour vnder Garnezey, you must sayle in by the south shore of the lande, and may Anker in the Channell at 20. or 25. Fatham neare to the sharpe tolver or els where at your pleasure. Ierzey standeth from Garnezey southeast almost 5. dutch leagues, where is also safe roade for shippes. S. Malo is distant from Ierzey. 8. leagues towardes the south and is a bard hauen: at the entrie whereof are rockes, betweene which you must sayle into the riuer, and cast anker before the citie at 5. or 6. fatham. And there lyeth a bancke Westward two or three dutch leagues from the towne, vnder which there is safe roade in 5. fatham water: There is also an Iland called Brybac standing from thence three dutch leagues, which you may sayle round about, and cast Anker where you will. And 2. leagues from thence there is a riuer called Lantrilliers, which hath many rockes and shoaldes on the West side.

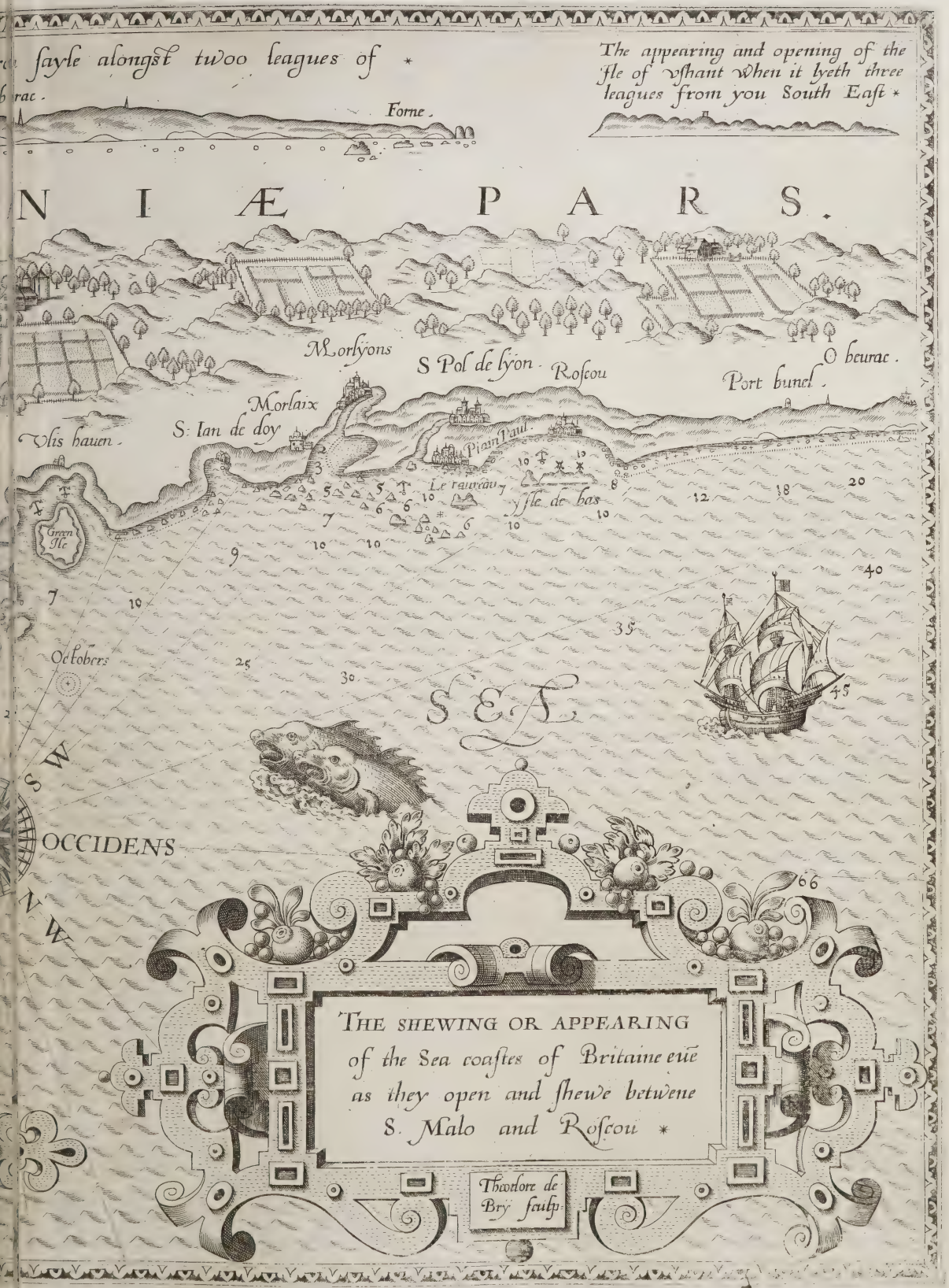
From thence stand the sept Isles distant two dutch leagues: within which lieth white hauen (called Port blanc) of 6. or 7. fatham. Those Islandes may be sayled round about.

There lieth a shoald called Octobers northWest from the West point of the sayd Iland about a league and a halfe of the shoare. Vlisshauen (called Green Island is situated a dutche league Westwarde, which may on both sides be entered: and is a most safe hauen for all Wether.

The Riuer of Morlays lieth fiue dutche leagues from the sept Isles and is a bard hauen: you may anker amongst the rockes at 5. fatham in the Channell. Two dutche leagues from that place standeth an Islande (commonly called Taureau) by which you may saile into the Riuer of S. Paul de Lyon, which without is full of rockes, but within them you may anker at 6. or 7. fatham. There lieth an Isle called Yfle de bas 2. dutch leagues distante from thence: you may sayle in on both sides of it to the Channell or Road of Roscou which containeth 7. or 8. fatham both on the east and west side. Obeurac beareth from Roscou 5. leagues hauing many white sandy bayes alongest the shoare, which are most certaine markes of that coast.

The Inhabitantes of these countries haue great entercourse and traffique with the Portugalles, viz. of Wheate, Rie, linnen Cloth, and other lyke grosse marchaundizes.

Thus Appeareth & openeth the land of Britaine abouts Sainte Paul
S. Paulus
Dinant
Dinant fluuius
Le taure
yſſle de Bas
BRIT
Fluuius
S. Seledor
S. Brieux
Plainconet
C de Late
Porterieux
S. Malo
Lanndliers
Pontrien
Port blanc
Bribac
Oreme
Sept yſſ
BRITANNISH
ORIENS
Iarſy
Gromes
Getebrokho
Cornet
Garn
Sea
C. De gruwe
English leagues · 20 · in a degree
Spaniſhe leagues · 17½ · in a degree
Dutch leagues · 15 · in a degree


sayle alongst twoo leagues of *
rac.
Forne.
The appearing and opening of the Ile of vshant when it lyeth three leagues from you South East *
N I Æ P A R S.
Morlyons
S Pol de lyon
Roscou
Port bunel
O beurac.
Morlaix
S. Ian de doy
Vlis hauen
Plain Paul
Le raureau
Isle de bas
Gron Ile
Octobers
S & E
OCCIDENS
THE SHEWING OR APPEARING
of the Sea coastes of Britaine eue
as they open and shewe betwene
S. Malo and Roscou *
Theodore de
Bry sculp.

RPJCB

A TRVE DESCRIPTION OF CONQVET, BREST, AND FONTENEAV, *THE WONDERFVL COASTES* OF BRITANY.

A Dutch league Eastward of the Cape of *Gobe*, called *Les Fours*, or the Fourn there are many blacke rockes lieng alongst the coast, which our seamen call the Backouens, and within the same are manie little white sandie bayes: The land is also somewhat lowe and bewtified here and there with some houses. To get the Channell or passage betweene the foresaid rockes and bayes, you must saile 2. Cables length from the said rockes almost South Southeast, keeping S. Matthewes Abbey in the valley Eastward from Conquet point: then beare inwardes vntill you come to Blanc-hauen or Conquet point, hale then to the outwardes, vntill S. Mathewes Abbey be open vnto you without Conquet point, sailing alongest a Cables length off: for so shall you not strike vpon the Bell, which lieth off Conquet point, almost three cables length. But keepe Flemynes bay full West of the white Friers called the Blancs Moines: But when you may plainely discerne Conquet you are thwart the rockes called Les Fenestriers, which lie vnder water at the east side of Conquet hauen. But if being at Sea you must turne in, bring S. Mathewes Abbey right without Conquet point, and saile againe about the rockes called the Hagles which lie almost a third part of the bredth of the waye from Vshant. There is a harborough betwixt Fenestriers, and the Blancs Moines vnder S. Matthewes point in 6. or 7. fatham

And if you will put ouer from S. Matthewes point to the Race of Fonteneau, you must conde ỹ ship from Blancs Moines south and by east, vntil you come to the Emperours and Emperes rocks called the Keiser, and Keiserine. But as you must not presse to neere Keiser, least you strike vpon the rockes which lie vnder water, so great heede is to be taken that you be not caried away with the tide or currente, which commonly setteth in towardes the Keiserine vpon the shoald called the Calfe, which stretcheth downe from Keiserine like a tongue: and it is allwaies there as a whirlepoole, and verie tempestuous. The Race of Fonteneau lieth out into the Sea South Southwest: But Bresont stretcheth into the sea West andby South foure dutch leagues from S. Matthewes. The marke to crosse the Race from S. Mathewes to the Keyser, is the mill of Fenestriers, standing directly Westward off S. Matthewes Abbey.

But if you will saile to Croixduyns from S. Matthewes poynt, hold on east and by south, so that you keepe still the Southermost part of the rockes, called the Cheminees without Blancs Moines, vntill you get the bay of Crodune, and the chappell appeare on the grauelly shoare, towards which chappell you may safely beare, and there anker, in 9. or 10. fatham. Ouer against Crodun by the north shoare lieth Bertrandes-bay, being a very good harborough for a north and northWest winde. But he which will goe vp to Breste or Landerneau, must get good Pilots, for it is all sounding water.

The Collignier beareth South Southeast about a league & a halfe from S. Matthewes poynt. The Faukenes lie off from the West poynt of Crodun about the fourth part of a league West southwest. The southermost Faukenes standeth from the northermost about halfe a league South South-east, and is vnder-water at a high spring-tide. A cables length off north north-east lieth a blinde rocke, which at lowest ebbe is euen with the water. This South Faukenes beareth north-east and by north from Crodun. There is also another hidden rocke West-ward from the north-east Faukenes which appeareth at lowest water. The rocke called the Hen lieth distant from Faukenes West South-West two Cables length. There is another called the Chicken almost north-West and by West from the Hen, being two sharpe rockes, which at a great ebbe are either euen or little aboue the water. There lieth also a rocke east and by south from S. Matthewes poynt, lyeng in the middest of Bertrandes-bay, by the North-side of the Water of Brest: And these are his markes, viz. When the southermost of the rocks, called Cheminees, are one with S. Matthewes poynt, then you strike vpon this rocke, but if it appeare a little without, then you goe cleare.

Vlest Penmarques is a bard hauen, which is to be entered on the East side along the shoare, and leaue the great rocke on the starre-boord side, which being once past, you may anker at three fatham Water: for as you come in, without the rocke, you haue 8. or 9. fatham: you may also sayle within the East Penmarques: for the mame is sandy strande, where you may anker in 10. or 12. fatham very safely, neere vnto the Isle of Motton, for there is faire ground.

The Appearing ofs the Ile ofs vshant, when it lyeth. Sou
from you th
Rousseou
Opening ofs vshant lying S. 2. by E. from you 3 leag
The same Ile when it lyeth three leagues from you E.N.E.
Ile de Bas
Ostenaue
Landerneau
Ile fou
Brest
Bresteuse
Crouezduyne
Crodun
Boxbetoh
Bay
Bagin
Barmel
Conquet
Conquets Point
Blankbauen
Le four
Pinies
Fenethes
S. Mathieus
The Hagles
Halman
The Bel
Blanc monet
7 Cheminees
VSHANT
Foukenes
Schemincker bergen
The hens
The chickens
Cossingreis
The Bay of Bofcant
Fontene
Keyserin
Keyser Cafe
Les Stains
Bressaer
THE GREAT

Thus appear the sheetes when you sayle there alongst before
Fonternau
Odet arne
Western Penmarques
Blauet
The appearing of the Ile of East Penmarques when you goe alongst it
The opening of the land of Groye when you sayle there alongst
Vanes
Barr
Groye
YNE
THE SEA
Carde of Britayne,
Conteining the Coastes,
Bays, Iles, and hauens,
that lye betweene
Rouscou and Groye
verie dilligently corrected.
Ao 1588
Theodor de Bry
scul.
Byndet
S. Gindaes
Gloyland
I. Motton
Eastern
Penmarques
Western Penmarques
OCCEAN
English leagues 20 in a Degree
Spanish leagues 17½ in a Degree
Dutche leagues 15 in a Degree

EPJCB

AN EXACT DESCRIPTION
OF THE SOVTH COASTES OF *BRITANY BETWEENE BLAVET, AND* Picquelier, wherein is also contayned *Belisle and Groy.*

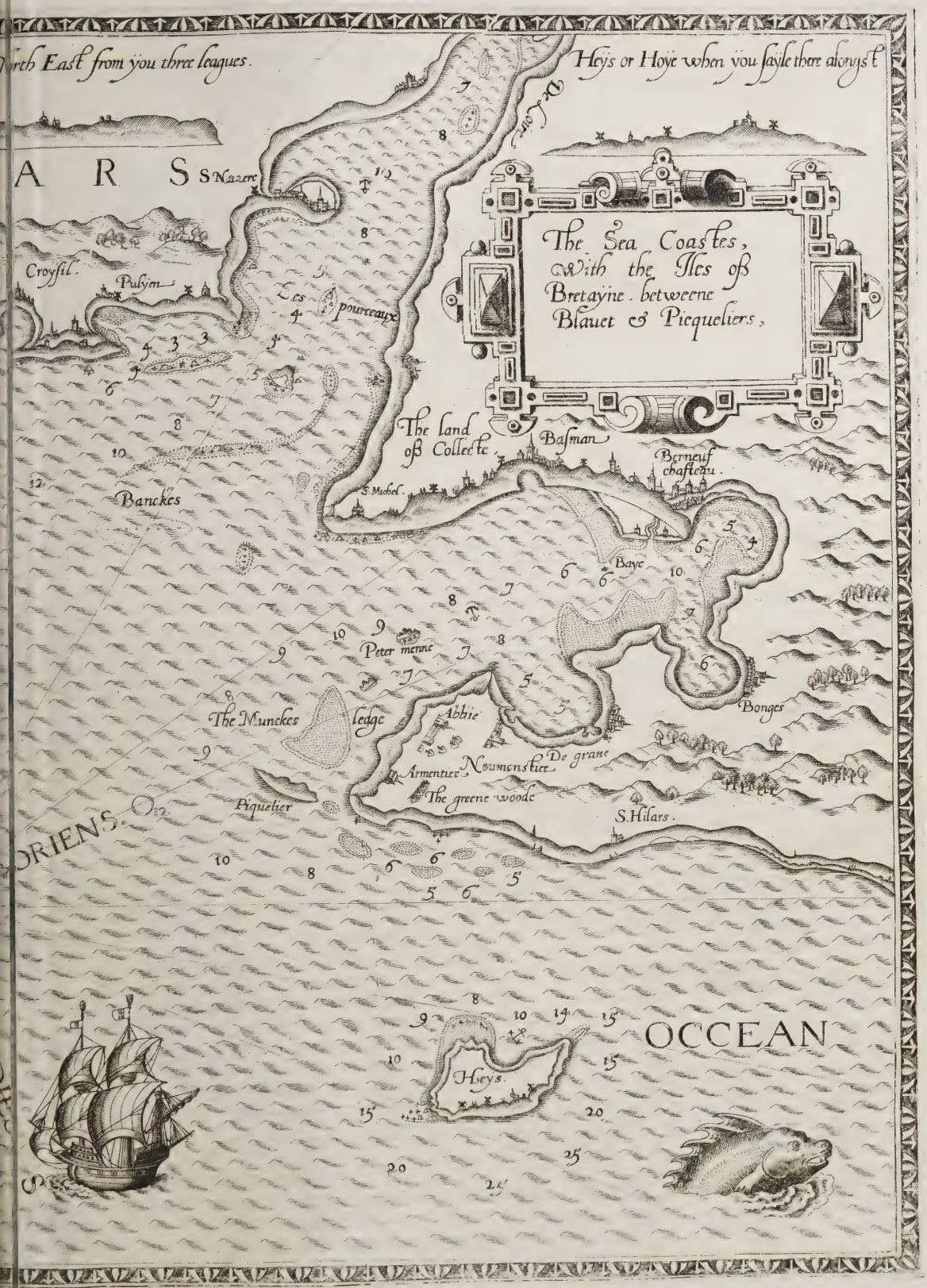
TO sayle into *Blauet*, when you haue the East poynt of the Iland called Groy South and by West, then are you come to the entry thereof which stretcheth inwardes north northeast, where is a very safe harborough for any winde or wether at 6. or 7. fatham water. In the entry you haue 4. fatham water but there lie some shoalds which you must shunne. On the West side of the entrie standeth a great sharpe steeple. There is also vnder Groy good ground for ankering 7. or 8. fatham deepe, and safe harborough for a south-West winde. But beware of the south-east shoare, for it is rockie ground. But if you will harbour vnder Belisle, you may goe in, on both sides all at large, where you may let fall your anker at 10. or 12. fatham water by S. Paules spire steeple. But at a Northeast or north north-West winde, you must way and plie vp to the East side of the Iland, where before S. Helen you haue safe road at 10. fatham. But if the winde come aboue at south, or south south-east, returne then before the foresayd steeple of S. Paule. There lie 3. Ilands about a league and halfe from Belisle, the middest whereof hath safe harborough: you may sayle betwixt them from Iland to Iland, & in some places finde good riding. About two leagues thence lieth the maine land, where are 2. great bayes, or riuers: from whence you may betwixt the maine, and the foresaid Ilandes, within Belisle, sayle to Croyswicke, or Croisill, and the riuer of Nantes, called the Loyre.

Croyswicke lyeth from Belisle about 8. dutch leagues East and by North, and East North-east. And from Croyswicke to the riuer of Loyre it is about 3. leagues. He which will goe vp that riuer, let him runne along the shoare of Croyswicke 3. cables length off to the pierced rock, which he may look thorough like a great gate. From thence let him keepe still two cables length off the northerne shore, streight to the point, whereon standeth a sharpe steeple, vntill he be within the rockes called Les Pourceaux, which lye in the middest of the riuer betwixt the pierced rocke, and the steeple. But when he is past S. Nazarethes steeple, he may anker in the channell at 10. or 12. fatham, where he must take in a Pilotte to lead him vp the Loyre vnto Nantes, by the helpe of the plummet. There lie Banckes to the Sea-ward a league and a halfe off Croyswicke poynt: betweene which, and the land called La Collecte he may sayle vnto the bay of Armentyer.

If ye will goe from the East-side of Belisle with the bay of Armentyer, let him conde East and by South till he come to the Abbie of Armentyer: beyond which on the coast side standeth a Woode: then he must sayle East North-east till the same Woode open a good way Northwarde from the Abbey: then shall hee be cleare of the shoald called the Munkes Ledge. Then must hee set Eastwardes towards the rocke called Peter Meyne, which you may on both sides saile by: assoone as you are past it, anker at 6. or 7. fatham, for the rest is to be sounded. Right ouer against Armentyer poynt standeth Picquelier: from whence the course lyeth South and by East to the Iland Heys or Hoy, vnder which is a dangerous road, and onely safe against a South-West and a West South-West Winde: there is alwaies a great noyse and troublesome whirling.

These coastes doe yeeld almost the whole yeere, Wines, White linnen cloth, Graynes, damaske Prunes, and Chesse-nuttes: which are transported thence to other countries. And Nantes, is the chiefest mart towne of these parts, whither the best Orleans Wines are brought downe the riuer of Loyre.

Thus Sheweth & appeareth the Ile of Groye when you sayle alongst it foure leagues of benige north north East from you
The Ile of Belile appeareth thus when it is East from you foure leagues
BRITANIÆ
Blauet
Mor:
bean
Virane
Araban
Barse
Groye
Pawels
Belile
SEPTENTRIO.
OCCIDENS.
THE
GREATE
English leagues. 20. in a Degree.
Spanishe leagues. 17½. in a Degree.
Dutche leagues. 15. in a Degree.


rth East from you three leagues.
Heys or Hoye when you sayle there alongst
The Sea Coastes, With the Iles of Bretayne. betweene Blauet & Picqueliers.
A R S
S Nazere
Croyssil.
Pulyn
Les pourceaux
The land of Collecte
Basman
Berneuf chasteau.
S. Michel.
Banckes
Baye
Peter merne
The Muncke
ledge
Abbie
Bonges
De grane
Noumonstier
Armentier
The greene woode
Piquelier
S. Hilars.
ORIENS.
OCCEAN
Heys.

A PERFECT DESCRIPTION

OF THE SEA COASTES OF PICQVELIER, *ROCHELL, BROVAGE, AND OF THE* Islandes, rockes, and shoaldes adioyning, euen as farre *as Garunne the riuer of Bordeaux.*

FIrst if you will sayle from *Heys* to the *Kellyats*, shape your course E and by S. and E S E vntil you are past the rocke called Le Baer d'Olone, which you may sayle round about: Then may you hale along the coast of Poitou, leauing two third parts of the water towardes the Isle of S. Martyns, vntill Vrcke come without the point of the Downes, and then may you see a little Tower and a Woode in the land of Bos, keepe that tower so long shut vp in the Wood, vntill the steeple in the coast of Poitou (which is called the Leper) doe come ouer against Vrcke, which you must so hold, vntill Rochell appeare without Bos poynt: then haue you passed the Lauerdine: And then may you sayle forth thorough Porthuis, or els cast anker vnder the coast of Bos at 6. or 7. fatham.

The markes of Lauerdine are these: If you will anker vnder the Bos, keepe Rochell from Bos a ships length, so you shall be cleare of the Lauerdine: But if you will anker vnder the Abbey of S. Martynes Island, keepe the Abbey right without the sandy poynt of the sayd Island, and hold on your course into the sandy bay Eastward of the Abbey, and so shall you escape the shoaldes of Lauerdine, for there is the roade for ships that are bound outward.

Porthuis is wide and broade, and stretcheth inward East South east: Brant or Burning Island standeth from S. Martynes three dutch mules S E and by East: from whence you may sayle to the Easterne shoaldes called Oesterbanke South South-east: keepe the little Tower of Hers on the West side of the Wood, vntill the red round tilde house, which standeth on the South side of the riuer Charante, be one with the steeple called Le Four: Then sayle East South-east, and South East and by East, vntill Soubyse be ioyned to the gray village called Graue Dorpe, that standeth on the shore side, & the little steeple of Hers, will shew it selfe right on the East-side of the Valley which is in Hers Woode: goe then by the markes South Southeast, keeping both the little steeple which is in the Valley on the East-side thereof, and the East little steeple of Hers, in the white sandy place. And these are the true markes of the channell of Brouage inwardes and outwardes vnto the Easterne flattes called Oesterbanke: and when the red round house couered with Slates appeareth beyond the broad tower of Vere, then are you past out of Brouage channell. Now if you will crosse ouer to Brant Island, bring not Rochell tower out of the Isle vntill you come neare the Island, because of the shoald called the Baniaert, which stretcheth downe by the Isle Oleron, and is seene at lowe Water. And the roade vnder Brantyslle is, where you may anker to heaue out your ballast in 12. or 13. fatham.

If you will enter the riuer of Bordeaux called Garunne, keep the steeple of Cordam in your sight East South-east, or somewhat more Easterly. On the other side of the riuer standeth an high redde Downe, which you must bring North-east from you, vntil you come neare the Downe which lyeth Northward: then coast along that side, vntill you haue entered the riuer on the North side: anker then before Royan at 6. or 7. fatham: all the rest is to be sounded. The North-side of the riuer hath redde Downes, and somewhat high, without trees. Three or foure leagues from the riuer side are low Downs, where grow some trees and Woodes.

In these coastes is great trade of bay salt, and wine, all the whole yeare: great plenty whereof is transported from thence to diuers countries: But Rochell is the chiefest towne of traffique there aboutes.

Thus Appeareth and openeth the land or Coaſte of Poictou, when it lyeth North East from you, abo
Olone
Abbye
Picquelier
S. Hilaire
S. Nycol
Olone
Orbeſſier abbye
The Bacres
Le K
Hey's
WESTERN
Wrekamia
THE SEA COASTES of the landes of Poyctou and Bordeaux ſuch as they ſhew and appeare, when you ſayle there alongſt betweene Picquelier & the Riuer of Bordeaux called the Garonne
Theodor de Bry ſculp.

The appearing or opening of the Ile of Saint Martins, when you take yo^r course through Portnuys
Port marant
la fosse de Loys
S. Martin
Vrck
le plomp
Rochelle
Nioeul
S. Cendre
Den bos
Angolin
Chatelaillon
Tour de carol
The baukes
Abbye
Ile de S^t Martins
S^t Ian
de Loys
Lauerdin
Brant Ile
Tour de four
Castille
Charente
La Charente fl.
Craqa
Bain
Iarrt
S. Denis
S. Pieter
The land
S. Andries
Oleron
S. Vrgens
Nazan
Soubise
S. front
S. Moyse
S. Jan D.
Ston bank
Easter bank
Broua ge
Herrs
Marenes
Mammesont
Salles
Lormont
Bley
Royan
Riuier de Bordeaux
Northern ayle
Cordauan
Southern ayle
S^t Mary
English leagues 20 in a degree
Spanish leagues 17½ in a degree
Dutche leagues 15 in a degree

A PERFECT DESCRIPTION
OF THE SEA COASTES OF ACASON *AND BAYON, AND OF THE* Eastern part of *Biscay* vnto *Castro*.

ABout 18. leagues Southward of the riuer of *Bourdeaux*, is a porte called Acason, at the entrie whereof are two great rockes, but on the North side it is broadest: shunne the inner point of the Porte, because it is full of rocks. In the very entry you haue 5. fatham water, but Northward it is deeper and faire ground: and contrariwise towardes the South lie many perillous rockes, whereof it behoueth you to be heedefull: you may sayle in at this hauen betweene the maine land and the rocke, amiddest the channell.

Foureteen leagues Southward from Acason, lieth the hauen of Bayon, whose entrie is wide and broade. Set the tower at the North poynt or cape of the land, and so sayle betweene the rockes and the cape, vntill you come into the hauen, where you may anker within the point before the towne at 4. or 5. fatham water. From thence the course is Southward to S. Iohn de Lux three leagues within the rockes, which stretch inwards Southeast, and Southeast and by South, where standeth a hill like a saddle bearing Southeast from you: The towne lyeth in a great bay, and so doth Fuenterabie vpon a fresh water riuer. Passai beareth 5. leagues from S. Iohn de Lux West Northwest. From thence you goe Westward two leagues to the port of Otera which stretcheth inwards South Southeast, and there haue you in the entrie 3. fatham water, but when you are within it is wide and broad, and the hauen is hard. Foure leagues Westwarde of Otera lieth Bilbao strething inwardes South and by East: after you are in, you may turne vp Eastward, where you haue 4. or 6. fatham water: on the South side of the hauen lieth an Island, where standeth a light tower, which you must set South and by East from you as you sayle in, where it is 3. fatham deepe.

Machichaco a good hauen lyeth fiue leagues from Bilbao West south West, and South West, & by West, which from the West side stretcheth inwards Southest and by East in 8. or 9. fatham. In the middest of the entry you shall finde a rocke, which you must leaue on the Larboord side: you may also sayle in at the East side of the rocke, but there you haue but 3. fatham: From the entrie, the hauen is wide and broad, and you may anker in any place of the channell at 8. or 9. fatham. Castro beareth three leagues Westward from Machichaco, & stretcheth inward Westerly. In the midst of the entry standeth a rock almost South-West, which you may sayle round about in 6. or 7. fatham. The streightnesse beareth vp Southerly: you may turne in towardes the East, and cast anker in the channell at 10. or 12. fatham.

These portes yeeld Rosin, Chessenuttes, Iron, Wooll, Orenges, Filberdnuttes, and steele, which are their trades.

The opening of Biscay betweene Saint John de Luz and Otera
Appearing or shewing of
B I S C A I
S. Ian de Luz
Fonte arabia
S. Sebastian
Filiolet
Pennas
Figuer
Oteva
Baione
C. de baione
Thus Appeareth the land betweene Acason & Bayon when it lyeth E. S. E. from you 4 leagues
Mimoser
Acason
MARE
THE
A CARDE OF THE
of Acason & Biscay
and opening of their
and Mountay

Opening betweene Castro and Laredo
Otera and Castro
Mo din
P A R S
Machichaco
P. Galto
Madin
Castro
Labais
Bilbao
P. Iagoder
WEST
H I S P A N I C V M
SPANISH SEA
Ryther sculpsit
* 1 5 8 7 *
English leagues 20 in a degree
Spanish leagues 17½ in a degree
Dutch leagues 15 in a degree

A TRVE DESCRIPTION
OF THE SEA COASTES BETWEENE Laredo and Sentillana.

LAredo beareth westward from Castro fiue Dutche leagues. To enter the bay, set S. Anthonies hill South East from you, and hale along S. Anthonies shore vntill you are cleare of the East poynt of the land. Then turne vp Eastward vntill you come to Laredo where you may lay out anker in 6. or 7. fatham. But if you will beare into the hauen within the two walles, you must doe it at highe water: for it is a port for barkes, and vessels of small burden. There lieth a shoald amiddest the entrie of the hauen, where it is allwayes very troublesome, and may be sayld about. S. Ander lieth foure Dutch leagues from S. Anthonies mount: hale along the West shoare vntill you come to the great rocke, whereon standeth a little house, on eyther side whereof you may saile in. S. Anders hauen stretcheth in from the entrance NorthWest, and hath 6. or 7. fatham water.

Foure Dutch leagues from S. Ander lieth S. Martyns. It is very narrow as you come in and a bard hauen, and parteth it selfe inwardes into two litle streames. Fiue dutch leagues by West of S. Martyns standeth S. Vincents whose hauen also is bard, and hath a Rocke standinge Westward of the entree, and a little fillet or riffe of sand from the East poyncte: you must sayle in betweene this sande, and the rocke, where it is narrow, but within it is a round hauen, mayntained by a little riuer.

Three Dutch leagues Westward lyeth L'hanes likewise a bard hauen, on the East side of which lyeth a banke: sayle in on the West side of it, there is likewise a little riuer.

In these countries is great store of Wooll, Iron, Chesse-nuttes, Orenges, Steele, and Rosin, of all which thinges there is great traffique.

After this manner Appeareth and openeth the land of Biscay, be

, and Rio de Sella, when you sayle there alongst

I Æ P A R S

S. Martyn

Lassiete Villas

S. Alana

S. Vincente

Ihanes.

OCCIDENS

OCCEAN

THE SEA COASTES of Byscay betweene Laredo and Sentilliana, euen as they shew when you pass before them.

1588

Theodor de Bry

H.P.J.C.B.

A TRVE DESCRIPTION
OF THE SEA COASTES BETWEENE *Rio de Sella*, and *Auiles*.

SIx Dutch leagues Westward of L'hanes lieth Rio de Sella. If you will enter the hauen, marke the maste which standeth vpon the Easterne shoare, neere which you must enter, because the West side is rockie and daungerous inwardes. And being past the mast anker before the towne: it is a bard hauen.

Villa viciosa beareth 10. Dutch leagues WestWard of Rio de Sella, you must come in by the Westerne shoare, because the Easterne is flat and perilous. Right within the mouthe of the hauen you shall finde a little shoald, which appeareth at a lowe ebbe, this is likewise a bard hauen. The towne standeth on the West side, whither you may sayle, & anker in the largest place. Six leagues from Villa viciosa WestWard lieth Sanpsons cape, and on the East side therof standeth a little Iland with a small tower: betweene these two is goodharborough, and faire ground to anker in at 6. or 7. fatham: on the West side of Sanpson euen right before the litle porte is likewise good riding in 6. or 7. fatham.

VVestWard of Sanpson lieth Gyon hauing a peere of stone, vnder which Th'inhabitantes doe lay their fisher boates: A good Dutch mile from thence WestWard is the bay of Tores, where is safe harborough, and 8. or 9. fatham Water. On the cape standeth an high tower. Two leagues farther WestWard lyeth Cape de Pennas, from whence a relue of rockes stretcheth out into the sea. Two leagues from thence standeth Auiles, the best porte of all these coastes: On the EastSide therof is a chapple, neare vnto the point you must passe, vntill you are within two rockes, where it is wide and broad. By the West poynt there runneth vp a little sandy riffe along the shoare, reaching inwardes by the hauen towardes the towne, where it is very shoaldie on both sides, and on the West side of the hauen lie two great rocks right against the little Church, that standeth by the sandy bay.

There is in these coastes farre greater plentie and store of fruits, Wines, and other good marchandises, than is in Biscay.

Opening and Appearing of the Land of Biscay eue as you sayle there a long

B I S C A
Villa Viciosa
Rio de Sella
THE GREAT
1 2 3 4
English Leagues at 20 in a degree
1 2 3
Spanish leagues 17 ½ in a deg.
1 2 3
Dutche leagues at 15 in a degree.

Rio de Sella and Auiles

I Æ P A R S
Sanson
Gyon
Tores
C. de Pennas
Auiles
O C E A N
The Mappe of the Sea Coastes of Biscay betweene Rio de Sella & Auiles, verie naughty hauens for great shippes
Iodocus Hondius fe.

A DESCRIPTION OF THE SEA COASTES OF *RIBADEOS, BIVIERO, AND LVARCA.*

FRom Auiles vnto Luarca, are six dutch leagues South-West and by West, it is an hauen for small ships and stretcheth Southeast inwards, the East side is dangerous, but the West is good and faire. Riba Deos, beareth South-West and by West from Luarca, and is a good hauen for all ships: Westward of it standeth a sharpe steeple, and a little from thence into the sea lieth a hidden rocke: When you enter the mouth of the hauen two other Towers come in sight at the West side of the hauen, the one on high, the other beloW nigh the shoare: Then conde thorow the very middest of the channell vntill you come against the second or farthest tower within the hauen: Where you may anker on both sides at your pleasure: But the West side is deeper containing 4. 5. or 6. fatham euen vp to Riba Deos, which standeth vpon a great bay.

The Cape of Brilo is six leagues North-West from Riba Deos. Westward from this cape standeth S. Ciprian, ouer against which lie two great round rockes. A league thence Westward, standeth an Iland thwart the mouth of the hauen of Biuiero, which you may sayle about on both sides: yet best roming in, is on the West side: Where being cleere of the poynt, you may anker at 6. or 7. fatham. Two leagues to the West of S. Ciprian is S. Marks roade, which is a faire bay. Two leagues from thence is a little hauen called Quirins, which on the West side is full of rockes, but on the East side faire and good to enter at. Three leagues from Quirin lieth the Cape of Ortegall where also standeth a Castle, neere which you haue safe roade for a West and a South-West Wind.

This countrey yeeldeth great plentie of the best Wynes of Ribadeos as well red as claret, and likewise aboundance of Orenges, Apples, Peares, Chessenuttes and other fruites: all which are both comfortable and wholsome for mans body.

Thus openeth the lande of Auiles .
When you are before Auiles
GALLI
Castropol
Ouiedo
Englishe leagues . 17½ . in a degree .
Spanishe leagues . 17½ . in a degree .
Dutche leagues . 15 . in a degree .
1587
Luarca
The land of Artedo
Candas
Artedo
C. of Auiles
15
18
HIS
MARIS

The Appering or opening of the land of Ortegal when it lyeth
fiue or six leagues South South East from you

A PERFECT DESCRIPTION OF
CORVNNA CALLED THE GROYNE, FEROLES, and *Monsej* the cheefest portes of *Gallicia.*

THe hauen of *Siguera* beareth three dutche leagues South westward from Orregall, it stretcheth inward South east, and is a good Porte, the Southside thereof hath a low point, and is good, but the Northside is all rockie and foule gound. You must anker before you come to the village of Siguera. Foure dutche leagues Westwarde from thence lieth Cape de Prior, which reacheth out into the sea. Two dutch leagues farther southward you haue the hauen of Feroles, vpon the northside therof are 2. or 3. sandie Bayes, of which the most Southerly is the greatest, Wherupon do stande a house or two, When you are come nigh the house, then appeareth vnto you somewhat Southerly the hauen of Feroles, Where you may sayle in at the middest of the water, and beynge cleare of the North corner, geuynge it a little bieth, anker in the Channell at 12. fatham, for before the village it self it is flat and rockie. The south poynt of Feroles stretcheth far outward, and is full of rockes: you may set out from Feroles to Corunna, South, and South and by East, vntill you be somwhat within the towre, which standeth vpon a round Hill or Cliffe. Then shall you see on the starborde side a litle Iland Wherein standeth a litle Church called S. Blase, hale alonge a Cables length of it, and anker before the towne at 6. or 7. fatham.

If you will runne into the Channell of Coruna from the Iland Cyzarga (called by the Fleminges Cæsarea) you must shape your course East south east about 5. leagues, vntill you are within sight of the towre which standeth on the west coast of the lande: for then shall you keepe 4. or 5. Cables length of the shore, and may holde on your course in the Chanel right South east 4. or 5. leagues: (and beinge past Corunna) may cast anker at Fontenne or Pytance, on the West side vnder a rew of Rockes at 10. or 12. fatham water. And ouer agaynst Corunna East north east standeth a cittie called Puente de Mas, Where you may also anker at 10. or 12. fatham. There haue you likewise on the northside a rew of Rockes, and ouer the Riuer a great Bridge.

There lieth an Hauen called Queres South south West, and South and by West, of the Iland Cyzarga, Whose entrie is fayre: after you are entred you must turne in Westward a great half league, and may anker there at 8. or 9. fatham in the channell. Seuen dutch leagues Westward of Cyzarga lieth the east poynt of Monsei or C. de Bellem, neare which you may sayle to Monsei South south east, and South east and by south. If you wil come in thither from the West, keepe the cape of Corrian called the Groyne Without Cape de conde two ships lengths, vntil you may see Marikerke which stands on the Westside cleare without Monsei poynt. Continue your course towardes Marykerke through the channel south east and anker behinde the Rokes before the towne at 8. or 9. fatham. Yet shall you not saile into Monsei before Marykerke be seene Without the poynt of Monsei. There you may likewise anker on the Northside of the hauen at 6. or 7. fatham. On the Southside of the towne of Monsei, there is a Bay, before Which lieth a shoald East north east about two cables length thwart the hauen.

Marykerke lieth from Monsei North and by East, but it lieth East North east from the Shingles. When you come from Sea, if Marykerke be from you South east, you may enter at the West side of the rockes: the rocks lie from Monsei South West and by south: but the inner end of the rockes beareth South and by West.

The Cape de Finisterre, and Monte Lauro, lie from eache other South east, and North West, and the Rockes betwixt them beare South south east. There is a Bay betweene the Capes of Finisterre and Corrian, Where eastward of the great Rocke you may anker before the sandie Bay at 6. or 7. fatham. A litle dutch league to the Eastward of Finisterre beareth the hauen of Corcouia, Which the Flemynges call Corco baiona: It stretcheth inwards to the North, Where you may cast anker in the channel at the sandy Bay in 8. or 9. Fatham.

These Coastes or Portes do yelde like Marchandises and Fruites as the aforesayd coastes of Riba deos &c. They take besides at certaine seasons euery yeare a Wonderfull great quantitie of Whales, to their great profit and commoditie.

Appearing or openinge of the lande of Oetugall
When it is fiue or six leagues frome
You South South East
GALLICIÆ
Pitance
Fontenne
Tros
Ponte de mas
Coruna
Fevoles
Stuerus
Prior
C. de
Ortegal.
MARI
Englishe leagues at 20 in a Degree
Spannishe leggues at 17 ½ in a Degree
Dutche leagues at 15 in a Degree

heweth and openeth the lande of Monsey
When it beginneth to appeare betweene
Cizarga and Cape de Cociana
Monte Louro,
Munick
PARS
of the sea coastes of Galicia and of Ostugall
you bee paste the Cape of Finisterre,
n as it is scituated and as it appeereth
hen you comme sailinge alongst
Out of the Spannishe Sea
Seche
Corco baiona.
Monsey
C. de Finisterre
C. de Corrion
Mariekerck
Queres,
Malpico,
Monge,
C. d'
belem.
HISPANICI
MERIDIES
ORIENS
PARS
OCCIDENS
SEPTENTRIO
Ioannes à Ruthinger fecit

A TRVE DECLARATION OF THE SEA COASTES OF *GALLITIA* FROM the Cape de *Finisterre* beyonde *Camino*.

IF you will sayle into *Muros* or *Moores*, set *Montelauro* called Mounteluer North east and by East from you, holde then on towardes Montelauro, and you shall go cleare of the Rockes that lie on both sides, but holde most of the south side, because that is the saifest. But when you come neare Montelauro, you shall see many high Rockes, which you must leaue on the lareboord side three cables length, and so go in. South south east of Montelauro you haue a blinde Rocke in the middest of the Channell, which you must leaue on the starboord side. But when the Towne that lieth in Northwards of Montelauro cometh full open vnto you, then are you past this blinde Rocke, which lieth South and by East, somwhat more Easterly of the East ende of the towne. You must shunne the first poynt within Montelauro, two Cables length of, and hauyng past the other poynt, beare in Northwardes to the towne which is on the starboord side. The citie Muros standeth on the West side of the hauen, where you may anker at. 12. or 13. fatham.

But if you will enter the Riuer of Roxo, you must set Southwarde without the cape of Muros, for there are many rockes stretchyng out into the sea on the Northside of the hauen of Roxo, which you cannot saile between. Wherefore holde on till you be south of the great rocke, and hauing left all the rockes on your Lareboordside or to the seawards, continue your course between the firme lande and the rocke, vntill you may see the hauen open before you. Then must you passe vp in the middest of the channell vnto the Island Roxo, and there anker where you please. But on the Southside are 2. or 3. bayes where is good anker holde. If you will go to Puente Vedra set in on the Southside of the Isle Blidedones, which is a very flat land, lying in length East north east about two dutch leagues: then shall you come to a little Island in the middest of the Hauen, which you shall leaue on the Larboorde. To the Southward of it you may perceaue a towre on the mayne lande, before which you must sayle, and anker at 7. or 8. fatham.

Foure dutch leagues from Puente vedra lie the Islandes of Bayon, which to such as come out of the sea, shew like gray rockes or cliffes. If you will go in at the North-side, your course lieth in midde water, betweene these Islandes, and the mayne lande, vntill the channell of Cannas or Cangas and Vigo be opened vnto you: then go Eastwarde in. The Hauen is fayre and large, you may ride on both sides, either before Vigo or Cangas: and may likewise go farther in beyonde the South poynte to Rondello, where both shippe and lading may be saife in the Dase without cable or anker.

But if you will sayle in by the south Iland of Bayone, your course lieth in the middest of the channell between the sayd Island and the mayne land, vntill you are cleare of the poynt of Bayon. Then set towards the East poynt of Boyon, where vpon standeth a castle afterwards turne southwarde behinde the Castle to the cittie, where you may anker at 6. or 7. fatham. You may also crosse ouer thence to Vigo, betwixt the poynte and the Islande or Rocke that lieth in the other side of the hauen at 3. or 4. fatham.

But if you will sayle from the southermost Islande to Vigo or Cangas, holde on two leagues North east vntill you may see thorough between the mayne and the North Island, and that the cittie of Cangas appeare without the corner, which is on the North side of the hauen. Then ariseth a low point on the starboord side, holde on in the middest of the channell between the sayd point, & the North land, where you may anker in what place you please: both on the South side before Vigo, and on the North side before Cangas in 12. or 13. fatham.

These countries and portes yeld great aboundance of Orenges, Chestnuts, and very small Wines. And thither is carried great quantitie of Corne, to the great benefit and behoofe of many Marchaunts and Marriners.

When Cape de Finisterre Lyeth North East From you
Then dæth it appeare after this manner
When Monte Lauro Lyeth East
Foure Leagues, the land of
Englishe leagues at 20 in a Degree
Spannishe leagues at 17 ½ in a Degree
Duytche leagues at 15 in a Degree
Polo.
Busco.
Noia
Prouey
Cambado.
Porto mouc.
Roxo
Roxo
Villa: noua.
Purkis
Mores.
Monsy.
Coa.
Muros
Montelouro.
Muro
I: Salure
Santbay.
Baya.
Corcobaiona.
C.d. Corrano.
C.d Finisterre.
MARIS
OCCIDEN

When the high Land of Viana, Fiue or sixe Leagues East North East from You Lyeth, Then Appeareth that ragged Coast Aboue Baione & the Lande of Viana after this sorte

RPJCB

A PERFECT DESCRIPTION

OF THE SEA COSTES OF THE NORTH PART of *Portugale* viz. from *Viana*, to cape *de Montego*.

ABout three dutch leagues to the Southward of *Bayone* standeth a monastery vpon the strand. Fiue Dutch leagues from hence is the riuer of Viana called Rio de Lymas, at the entry wherof lyeth a notable ledge of rocks. That you may goe cleare of the same, hold on still Southward, vntill the two fire or watch Towers which stand vpon South-land be brought in one. For by these markes you may hale along the shoare in 4. or 5. fatham, vntill the two houses and the little steeple which you see vpon the Northside of the land be brought together. Then hold on so alongest the shoare on the East side of the rocke whereon standeth a mast, vntil the riuer lie open before you. Then saile inwards on the South side of the second rocke, whereon also standeth a masse. Then crossing vp Northward to Viana anker at 7. or 8. fatham. In the very entrie lieth a barre, whereon is two fatham water. Fiue Dutch leagues South of Viana standeth Villa del Conde, and at the entrie of that hauen are many rockes, rounde about which you may safely passe in 5. or 6. fatham depth. Farther inward lieth a barre or a shoald thwarting all the mouth of the hauen and hath 2. fatham water, the deepest place in all the hauen is not aboue 3. or 4. fatham, but the best depth is to the Southward. It is a bard hauen, and in the North part, full of rockes and sandes.

Three leagues Southward of Villa del Conde lie the great high rockes of Lesons halfe a league to the Northward of the riuer of Port de Port, called Rio Duero, betwixt which rockes and the mayne, you may saile in on both sides, and there ride at 6. or 7. fatham, for the ground is very good for ankering. There lieth a rocke vnder water halfe a league Southwest of the west corner of the said rocks.

The porte of Metellyn, lieth within the foresaid high rockes, being a bard hauen of 2. fatham. A league Southward of Lesons rockes, lieth the Riuer Port de Port, into which you must hale on the North side, keeping all the rockes Northward of the riuer, and saile along the South shoare East and by North, vntill you are cleare of the rocke whereon standeth a crosse, then fare you forward in the middest of the riuer to the citie Port de port. Inwardes it is 10. or 12. fatham, but the entrie is onely 3. or 4. fatham deepe, at halfe floud. You may enter likewise on the South side along the shoare, where at high water there is 3. fatham.

From Port de port to Aueiro is 8. leagues, all the coast alongst the shoare is downes. About the mouth of Aueiro are ragged downes, and may hale along the strand at 10. or 12. fatham: when the high blacke hill within the land beareth East and by South from you: then are you in the entrie and right before Aueiro riuer. When you are come in 6. or 7. fatham water, you shall see three masses standing vpon the shoare, which you must keepe together, bearing inwardes East and by South, and East South east, vntill you come neare the shoare, where these masses stand by the sand bancks. Then set Northward, and holding on neare the North shoare, leaue all the flattes on the starreboord, vntill you haue the riuer open before you. Then turne in againe East South east vp to Aueiro in the middest of the channell, betwene both the coasts. At the entrance vpon the shoald at halfe floud, you haue but 2. fatham, vntill you are within it, where you haue 5. or 6. fatham depth.

Fiue Dutch leagues Southward of Aueiro beareth the Cape de Montego, and a league to the Southward of that Cape, lieth the bard hauen Pisage: halfe a league to the Westward from thence in the sea lieth a bancke conteining 6. fatham water, vnder which you may ride at 12. or 13. fatham. Under the Burlynges which are pourtraied in the next Table, you may cast anker at 10. fatham right against the Hermitage, where you haue very faire ground.

These countries yeeld store of Wines, Oringes, Oyle, and Olines, and much good Salte is carried from Aueiro. But the citie of port de port is the chiefest Towne of traffique in all these coastes.

Shewing and opening of the land of Portugal when

leagues from you & that you sayle there alongst *

When this litle black hill lyeth East and by South from you then is the Riuer of Aueiro open before you

Montego

Salt land

Closter

Auciro

Ville noua

Greige

Catelina

Incasa

The River

Salt land

Salt land

Oica

Lagos

Mira

Capo de Montego

Pfage

ERIDIES

S

N SEA

THE SEA COASTES OF Portugal betwene Camino & Montego, eũe as the Countrie there aboutes is lying and situated: with all the hauens thereof Exactly dõne, and coreĉted With great dilligence *

Theodor de Bry

RPJCB

A PERFECT DESCRIPTION
OF THE SEA COASTES OF THE MOST notable part of *Portugall.* viz. from the *Burlinges to beyond Sainct Vues.*

THe Cape of *Roxent* beareth 12. leagues South and by East, and South south-east from the Burlings. About a league to the Eastward of Roxent lieth the Roade called Caſcals: Where against a North wind you may anker at 10. or 12. fatham. If you wil from Caſcals into the riuer of Lysbone, hale along the north ſhore bearing a looſe from the firſt blacke poynte, about a cables length. Then go towards S. Gyles poynt a quarter of a Cables length of it: but take heed you enter not in a calme and a low ebbe, becauſe the tide ſetteth ſtrongly vpon the northern ſhoalde, called the north Malechopos or Katchupps: When you are within S. Gyles, beare alongeſt the North ſhoare, vntil you are paſt the caſtell called Reſtiers, or Raſtels, and anker at 12. or 13. fatham, before the Towne called Bolin.

But if you will ſayle in the channell called the Craeck deepe, or great deepe of Liſbone, ſet the weſt poynt of Roxent right againſt Caſ-cals, vntill the abbey which ſtandeth vpon the hill Weſtward of Reſtiers aunſwereth to the little tower which beareth Northwardes vpon the land: Then goe ſo towardes the Abbey of S. Katherynes almoſt North-eaſt, and North-eaſt and by Eaſt, vntill on your Larboord ſide you haue two third partes of the riuer. Continue then your courſe towards Reſtiers, vntill you are paſt the caſtell, where you may anker at your pleaſure.

But if through the Craicke deepe you will turne in or out vpon a board, bring the ſaid little Tower two maſtes length Weſtward and the like diſtance to the northward of the ſayd Abbey, and euery time when you haue brought your markes after this ſort, turne the ſhippe, vntill you come to S. Katherynes bay.

But if you will ſet towardes the Bankes of S. Vues or S. Toous, keepe the firſt poynt lying to the Weſtward of Zizembre a ſhippes length without the point that beareth Eaſtward of it, vntill you ſee a white houſe appeare ouer againſt the caſtell that ſtandes on the ſhoare: Then may you diſcouer the caſtell of Palmedo in a great valley: keepe theſe markes after this maner, and goe North Northeaſt and North-eaſt and by North, vntill you are paſt the aforeſayde caſtell on the ſhoare. And from thence hale along that ſhoare at a cables length to S. Vues. In the banks of S. Vues lie 7. ſhoaldes or barres, which at full ſea haue 4. fatham water. On the South-ſide theſe bankes are drie, and doe for the moſte part ſhewe aboue water. The entrie along the South coaſtes is onely for Barks, and ſmall veſſels, anker neare the citie of S. Vues at 6. or 7. fatham.

In this part of Portugall is ſo great trade and varietie of traffique, that it is hardly to be matched in all Europe. For there is great plentie of all kinde of ſpices, ſuger, ſilver, golde, wine, oyle, ſalt, Iuory, cochenille, braſill, and innumerable other kinds of marchandiſes, that are brought thither out of the Indies, and from thence tranſported and diſperſed throughout all Europe.

Roxent, when it lyeth East and by South from you, foure or fiue leagues
Syntra
Roxent againe, when it is North East from you, foure or fiue leagues
Syntra
PORTVGALLIÆ
THE SEA MAPPE OF Portugal wherein are situated the most famous mart towne of Lisbone & S.t Vues with their Riuers and coastes as they show when you saiell vp and downe them *
PARS
Syntra
M. de Roxent
Ionge Roxent.
Syntra
12
15
2
5
10
25
20
18
20
25
25
22
Barlengas
15
10
18
MARIS
OCCID

SETVBAL
S: Vins.
Palmelo.
Alcouchete.
Blaise
Troia
THE LAND OF TROIANES
Palhais
Couna.
Los bancques
Almada.
Restier
Quembre.
Rio Daposata.
C: de Pitziers
C. de Spichel
Malechopos
Malechopos
Cracke drop
WES TERN SEA
N
S
TALIS PARS
English leagues · 20 · in a degree
Spanish leagues · 17½ · in a degree
Dutch leagues · 15 · in a degree
Theodore de Bry fecit

A PERFECT DESCRIPTION
OF THE SEA COASTES OF *ALGARBES*
the Southern part of *Portugall.*

AT the Cape of *S. Vincent* you haue salfe harborow for a North and NorthWest Winde: Two leagues from Lagos, lieth a great rock vnder water, and a great league Southward from Villa Noua: Whether if yee will goe bring the tower and the mast standing vpon the East land togither, and holde alonge the shoare vntil you are past the tower, then beare in NorthWard till you come before the citie of Villa Noua, Where on the South side you haue a great drie bancke: at the entrie or mouth is onely 2. fatham water at half floud, and the north side is ful of bancks and shoaldes. About 6. leagues EastWard beareth the citie Faraon, Where, vpon the shoare standeth a light tower, from the corner whereof lieth out a banck which you must auoyd. Go in on the East side setting the tower on the Larbord, & the shoare of Tauilas on the starreboord side. Foure leagues NorthWard of Faraon lieth Tauilas, the entrance is crooked and full of shoalds which you must passe by obseruyng the shoare markes, beacons, and other signes before you may enter. At haike floud you haue there not aboue 10. or 12. foote depth, & euery yere the channell shifteth. Foure leagues from thence NorthWard lieth Aimont, a good hauen, and you may beare right in from the sea, or may enter by the Eastside hard aboord the shoare: Within, it is wide and broade, you may turne to Castro-Marin or Aimont, Where you may anker at 5. or 6. fatham, as you shall thinke best.

Fiue leagues further EastWard you haue the channell of L'epe Which doth chaunge almost euery yeare. Two leagues EastWard from thence lieth the entrie of S. Michael Where you may come directly in from the sea, & then from S. Michaels with litle barkes you may passe the shoaldes to L'epe or Cartaya, Where you may take in the good Bastard Wine.

These Hauens doe yeeld figges, oyle, corke, and Wines, there is also great store of fish taken at Lagos, Which is carried thorough the straightes of Gibraltar, sold and distributed among the most part of the townes of the Leuant.

Thus Appeareth & openeth the land about the Cape of Saint vince
Blewe hill.
Salines
Blewe hill.
Salines.
A Description of the Sea Coastes of the land of Alqarbe, and a parte of the Condado with their shew & opening
Aliamur
THE KINGDOM OF
Alaguas
Villa noua.
Figge monnte
Figgemonnt
Lagos
Sogres
S. Vincente.
Bon puerto
C de S. Vincente
THE GREATE

mme out of the North and sailing there alongs t it

Figgemonnte

Cartaya.

C de S. Vincente.

EL CON-
DADO.

S Miguel.

Lepe.

Ferrona

Aimonte

Castro marin

Tauilas.

Molinas

VE

Faraon

C. de S.

Maria

OCEAN

Z

M

E

English leagues 20 in a Degree

Spanish leagues 7½ in a Degree

Dutche leagues 15 in a Degree

RFJCB

A PERFECT DESCRIPTION
OF THE SEA COASTES AND HAVENS *OF ANDALVZIA.*

Saltees beareth 4. leagues Eastward from *S. Michaell*, you may saile by it, to the great Condado, and may goe in by the West entrance, and keepe Guelua, which we call the VVolfe, ouer the Easterne point of the hauen, bearing inwardes to Saltees. But if you will enter by the land side, then must you beare in with the West ende of the White cliffe: hale then a cables length off alongest the shoare by the great tree, that standeth Westward of the cliffe, keepyng still the point of the hauen right ouer against the Tower of Odier, vntill you are cleare of the Island. Then set Northward to Palos, where you may anker at 5. or 6. fatham.

Saltees lieth 8. leagues from Chipiona South-east: you may heere enter the riuer of S. Lucar de Barrameda called Guadalgueuir two cables length from the shoare: and when you are cleare of the second shoalde, giue it a birth of the South shoare, vntill the Abbey and the great tree are one: then holde on to S. Lucyfers Church commonly called S. Lucar de Barrameda. To get the true depth and channell of the riuer set the said great tree right ouer the East-end of the Abbey, and so may you enter or goe forth. But when Chipiona beareth South SouthWest from you, and the castell and tower are one, then are you neare the first blinde rocke or shoalde. The markes of the rocke that lieth in the entrance of S. Lucars channell, are, when the Windmill and the White Frierie are brought togither on the East-side of S. Lucar, for then should you by sayling forwardes strike vpon the rocke: wherefore keepe the Windmill fiue foote distant NorthWard of the Abbey, and then shall you enter in the best of the channell, which at halfe tide is 4. fatham deepe. Within, it is wide and broade, anker there at 10. or 12. fatham before the little Church which standeth on the North shoare.

Calis-malis lyeth South-east from Chipiona 7. leagues, there haue you the entrie wide & broad. You may sayle in about two cables length of the Puercos, which lie about half a league from the North corner of Calis. About a great halfe league North-east and by North from thence lieth a rocke vnder water called the Diamant: then appeareth S. Maryes little Church betweene two great highe hilles.

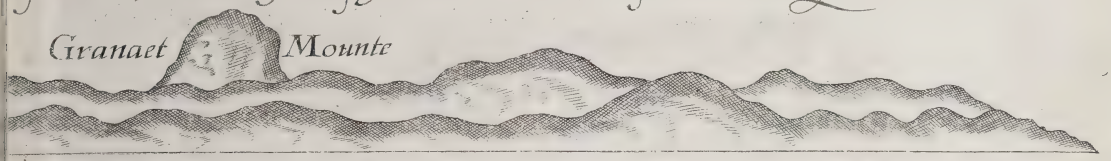
If you will go farther in then Calis, hold on South-east beyond Puntall, where is good harborough for all Winds. Calis bay is wide and broad and of 15. or 16. fatham depth. A North-West winde beateth full vpon it. From Calis to the straighte of Gibraltar you haue eight leagues: and three leagues thence to the hauen or roade of Gibraltar, which is a very fayre bay, and is able to conteyne many ships.

About the poynt of Tariffa or the streight, halfe a league from lande, lyeth a shoalde no deeper then 1½. fatham, which you must bee heedefull to auoyde.

These countries bring forth all kindes of the best Wines, fruites, and other Marchandises, as Seckes, Ballarde, and Romany, Figges, Reasins, Oyle, Oliues, Pomegranets, Cytherons, or Orenges, Sugar, Skinnes of India, and great plentie of the best Salt.

Casa blanca
The opening & appearing of the land or Mountaines of Gibralter when you begin to sayle into the Straight
Rio Tinto
S Iuan del Puerto
Condado grande
Salt pannes
A N D
Moguer
Guelua
Piclos
Olliet
Saltés
The Cliff
Las arenas gordas
Redd Downes
Higuera
THE SEA COASTES of Andaluzia made according vnto the right situation thereof eauen as they appeare & open with their Riuers and hauens *
MARIS OCCEA
English
Spani
Dutch

high land on the back side of Cales, called the Mounte of Granata, When you sayle into Cales before the Bay *



A DECLARATION OF THE SEA CHART FROM THE FARTHEST part of *England* to *Plimouth*.

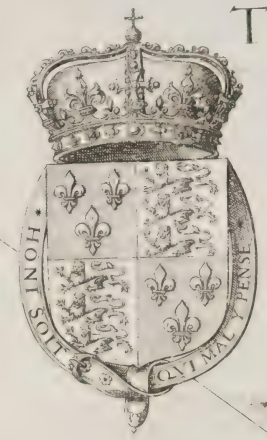
IF comming out of the East, you are bound with the Sorlinges, shape your course in by the Easterne shore at 8. or 9. fatham. There is a Bulwarke or sconce before the castell: And thence off a little waye lieth a rocke vnder water, you may sayle betwixt it and the Bulwarke. On the west side of the hauen are two rockes, keepe them in one, and goe neare the North shoare, so shall you safely sayle without the poynt in 10. fatham, but take heede you come no nearer. To go cleare of the rocke that lieth in the entrance, set the northerne rocke northward of the other rocke, so much as you may see thorough them, and then are you on the North-side of the rocke that lieth in the entrie. And when you are past the rockes that are aboue water, turne Northward neare the castell, and anker at 8. or 9. fatham. If you wil go from the Lysarde to Monsbay, hold on West North-West, vntill you see the castell in Monsbay vpon a high round rocke. Then beare into the Bay, right on the west side of the castell, vntill you discerne a litle Iland nigh the West coast, whereupon are two sharpe steeples like vnto Watch-towers or beakons. And goe so into the Bay nigh to that Iland or rocke, (for there alongest it is cleare) leauing the castell a good way on your starreboord side. by reason of the rockes adioyning. When you are past the Iland, you shall see a great sandy bay, where you may anker in 7. or 8. fatham. But the best of the roade agaynst a South & South South-east winde is at 6. or 7. fathã.

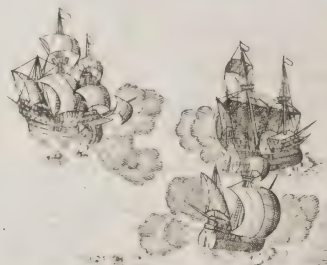
If you will sayle to Fallmouth, hale inwardes alongest the Easterne shoare two cables off, that you may be cleare of the blinde rocke that lieth in the entrie. Beyond the hauen standes a high wood, which you must keepe beyond the Northerne poynt of the West land. By that wood are two chalky marks, which you must likewise keepe aboue the sayd poynt, then beare towards the middest of the high West land, where you may anker at 15. fatham, at the northerne poynt of the high land: But if you will runne farther in, plie Eastward towardes the Bay, and when you are cleare of the shoald which reacheth downe from the Easterne tower inwards towardes the middest along the hauen, there anker within the bancke neare the East land at 8. or 10. fatham.

Foy standeth also in a great Bay, beeing a hard hauen, where on each side standes a tower. Beare in betweene both shoares. But on the West-side the water is broader betweene the stakes and the tower which standeth on the West coast. But if you will hale in along the West shoare within the stakes, bearing a little off from the land, holde about the middest of the channell, but nearer to the Westward, vntill you come before the towne where at full sea you haue depth enough.

Here is no great trade or traffique, but for broad cloathes, kersies, and Tinne. The greatest part of the inhabitantes liue vpon graling, & shipping.

The Chanell of Bristol





The lands ende of Engla
& openeth when you Co
Spanish Se

According to this manner Appe
North West & by West f

S.t Just

Lezard.

PENSANCE

The landes ende.

Newlyn

S. Burien

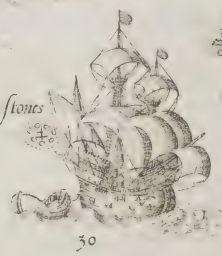
Mousbay.

Boskenna

Lamorley point

S. Michaels mount.

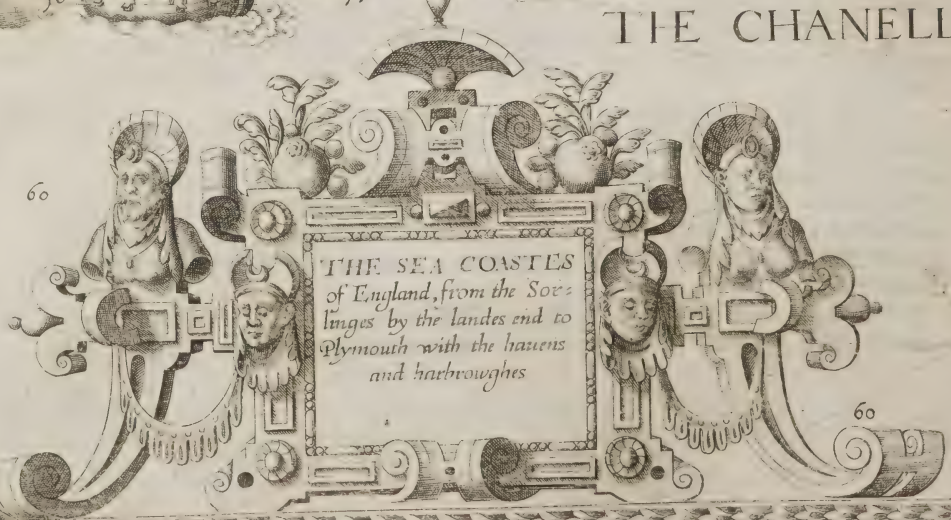
Seuen stones



THE SORLINGES

The gulfe

THE CHANELL



or opening of the fles called the Sorlinges
ast North East from you two leagues
The saide fles, when they lye South East from you
aboutes two leagues
The Easterne Coast of
Englands ende when it
lyeth East North East
from you three leagues
The Lizard or Cape of Cornewall
as it appeareth when the West ende
therof lyeth North West from you
a league, and the East ende North
two leagues
Falemouth, when the Castell lyeth North West
& by West from you; And Dudmans poynt
North from you, three leagues
neth, the lande or Coaste of Lizard, Falemouth, & Dudmans poynt when the Castel is
out two leagues, and likewise Dudmans poynt three leagues from you Northewardes
Falemouth,
SALTASHE.
Dudman poynt.
Pendennas castell
Treuro
N G L I Æ P A R S
Limehouse
Milbrooke
Plymmouth.
M Edgcome
Mylor
Mylor poole
Foye
Haule
Maker
S. Nicholas
Ramhead
Low
Bank
Wolas cast.
Arwenack
Tallant poynt.
Pendenans
Helforde hauen.
Falmouth hauen
Dudman poynt
Ide stone
Mewstone
Halsyn
Manacles poynt
SEPTENTRIO
ENGLAND AND FRANCE
ORIENS
MERID
Theodore de Bry fecit
English leagues 20 in a degree
Spanishe leagues 17½ in a degree
Dutche leagues 15 in a degree

A PERFECT DESCRIPTION
OF THE SEA COASTES OF *ENGLAND*
betweene *Plimouth* and *Portland*.

IF you will sayle into the Sounde of Plimouth and goe cleare of the Rocke, beare alongst hard by the East-side of the Iland wher it is 5. fatham deepe at high water, vntill you see the Churche of Lyme-house on the West-side of the valley, for then are you cleere of the rocke: behinde that Iland and vpon the maine lande of Plimouth standeth a Wall, which if you doo heedefully marke and Lyme-house Churche appeare on the North head of the aforesayd valley, then shall you runne right vpon the Rocke, where you haue but 3. fatham at low water: yet behinde the Iland you may anker in. 12. or 13. fatham. But if you will forwards into the West harborough, set WestWard betWeen the Iland & the mayne land vntill you haue opened the West harborough hauen, then holde on in the middest of the channell betWeen both landes, vntill you are Within the West poynt, Where you may cast anker at 9. or 10. fatham. When you will sayle from the Cape called Ramhead into Catvvater, then plie towards Plimouth point vntill Catvvater lie open before you, leaue the greater parte of the Water on your starborde side, and so sayle into the middest of the channell, Where you may anker right against the northland in 4. or 5. fatham at a dead low Water: And you may anker also on the side of the entrie vnder the Cape of Ramhead NorthWard thereof by the shoare in 10. fatham Water for there is cleare grounde.

If your course lieth to Dartmouth, you shal diserne a red point on the East-side of the hauen, and a blacke point at the waters side. In the Red poynt lieth a great White rocke: When you haue brought this rocke right ouer the Black poynt, you are harde abourde the Blinde rocke, that lieth thWart the Channell of Dartmouth, yet neerer to the East-Ward. But When you come to diserne the Kay of the toWne that standeth on the East-side of the hauen, keepe amidst the channell, vntill you may perfectly see the same, then hale inWardes vntill you are Within the tWo Castles standyng on the hauens side, and you shall go cleere of the Rocke. The hauen is Wide Within: you may turne WestWard and let fal anker before the toWne or the Brew-houses Where you list. Three leagues East-Ward from thence is the road of Torbay, Which is very safe for a South-West Winde: you may likeWise anker on the East-side of the start Where is good anker holde in 8. or 9. fathã. Foure leagues to the NorthWard of Torbay lyeth the bay of Tynmouth a safe harborough for a South Winde, Where is also good ground for ankering in 7. or 8. fatham. If you come out of the West into Portland road, holde on tWo cables length off alongst Portland shoare: and hauing past the poynt, turne WestWardes till you come to the castell: Where is good road against a South, and South and by East Winde at 7. or 8. fatham. NorthWarde of Portland, lieth a litle bard hauen, called V Veymouth, Where you may anker at 4. or 5. fatham. If you Will ride vnder S. Aldomes Land shun the Needles of Shipmans poole, and so saile into the toWn, Which at a low Water you haue ankerying at 3. fatham.

These Portes yeeld almost nothing els but Wooll and clothe: the inhabitantes doe liue chiefly vpon grazyng.

The Easterne land or Coast of Plymmouth, when that high land North from you lyeth three or four leagues.
The appearing of the land of Dartmouth. When you sayle there before alongst.
Torbay
S Patrikes
Plymmouth,
The Frierie
Catt water
S Nicholas
Dartmouth.
Kingswear
Castle
Torbury.
Ramhead
Mewstone
Jde frone
The Start
THE CHANELL
Thodore De Bry fecit.
Engliſhe leagues 20 in a Degree.
Spaniſhe leagues. 17½ in a Degree.
Dutche leagues. 15. in a Degree

en you sayle there alongst two leagues of.
The Shewing of S Aldoms land or coast,
When it is twoo leagues from you.
PAR.S.
Waymouth.
Burport
Sandlesoote castell
Mount poynings
East Chaldon
Purbeck
Lulworth
The East
Port land
The Ras of Portland
North East & by North.
North East.
North East & by East.
East North East.
East & by North
ORIENS. E.
East & by South.
East South East.
South East & by East
South East
OF
A DESCRIPTION OF THE
Sea coastes of England.
Betweene Plymmouth &
Portland. With the
cheefest hauens thereof.
according vnto theire
Situation

RPJCB

A PERFECT DESCRIPTION
OF THE SEA COASTES BETVVEENE THE
Isle of *Wight* and *Douer*.

TO goe in at the west end of *Wight*, you must looke well to the tide for the flood sets very sore vpon the Needles, and the ebbe likewise Westwarde vpon the Shingels and Chalke Rockes which lie Westwardes of the Needles, and it is very narrow between the Needles and the Shingels, Wherfore saile directly with the Needles very neere them, and keepe the inner poynt of the Isle right without the Needles: And When you are so come within the Needles, beare somewhat off the Island between the Chesell & the Isles poynte, (because of the Rockes called the VVardens, which lie on V Vight-side neare the shore) then turninge Eastward ouer against Calshotte, you must cast anker in 7. or 8. fatham.

But if you will enter at the East ende of V Vight, keepe the Castle right against the Lime-kil that lies aboue Portesmouth vntil that Culuer cliffe come within the point of the Ile, for then shall you haue brought the Lyme-kill to the east end of Portesmouth: Which you must so holde vntill the Castle which standeth to the Westward of Portesmouth doo appeare on the East side of the Wood: and then plie sometimes towards Saint Helens Abbey, keeping your markes in this sorte, you shall take no hurt on the Shoaldes or Sandes. But if you cannot see the Limekill, then shall you keepe the Castle on the West-side of Culuer cliffe, vntill you haue brought S. Helens church without the poynt of the Island a shippes length. Then may you freely sayle Northwest vp, without any daunger of the Riffe or tayle-land that lieth out. Then keepe the square Towre between the East ende of Portesmouth and the Castle: vntill you may see the Castle which standeth on the West-side of Portesmouth, Eastward of the Wood: and so may you goe inwardes.

The marks of these Shoalds and Flats are these, viz. The Castle standinge Eastwards of Portesmouth, and the square towre, wherof I haue now treated. When you haue brought the Lymekill so much to the Eastward of the Castle, that you may but see betwixt thē, then are you vpon a litle shoald, which at low water hath 5. fatham and a halfe: and then haue you the Castle that standeth on the west ende of Portesmouth, at the West corner of the Wood. But When the square towre that standeth by East of Portesmouth is brought Westward of the Castle: then the Castle by West of Portesmouth standeth at the Woods West ende. You haue there at high Water 6. fatham. And when the square towre is seen betwen the East end of Portsmouth and the Castle, and the Castle standeth right betwixt the Limekill and the towre: & likewise when the Castle on the West end of Portesmouth standeth to the Eastwarde of the Wood, then haue you 11. fatham at high Water. But when the Limekill and Portesmouth towre are one, & the castle beareth Westward of the Wood, then haue you 10. fatham at high Water, and lastly when S. Helen lieth south West and by West from you, then the South east ende of the shoald beareth North east, and by north from you.

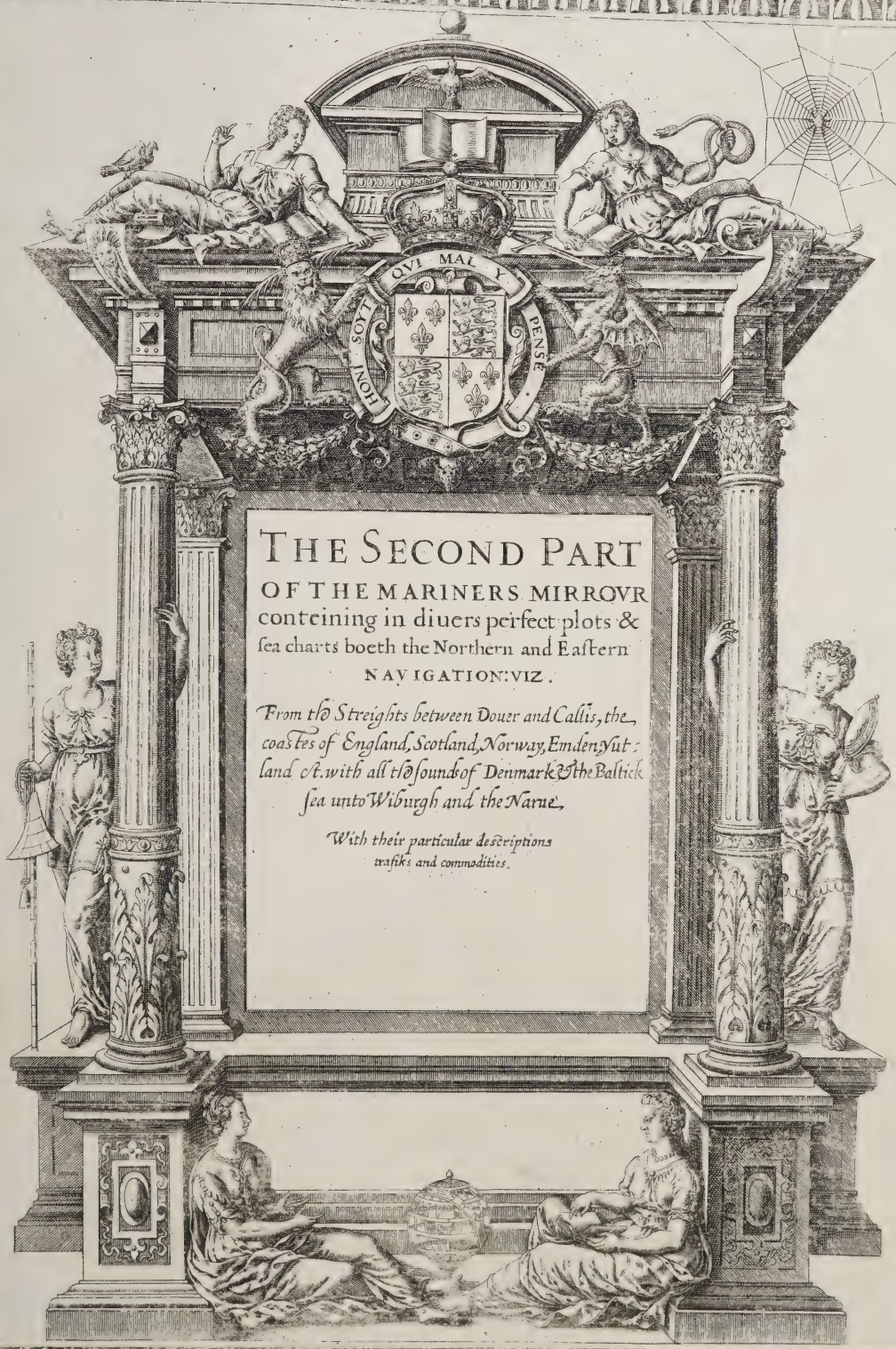
Three leagues Eastward of V Veenbridge lieth Arundel, Which is a bard hauen, & at half flood. 2. fatham deepe: you must go in by the West coast, and let fall your anker before the towne in. 5. fatham. Foure leagues from Arundell standeth Newv Shoram, The East side therof hath a graueliy Chesell, Where alongest you may sayle in, and in the entrie you haue. 3. fathā Water at half flood: in the midst before the hauen lie rockes vnder water. The entrie on the West side is wide and broad, and is at halfe flood 2. fatham deepe, the hauen is large and broade within, where you may anker in 4. or 5. fatham.

If you will sayle into the Cammer of Rye, shape your course alongst the Shingels: and when you shalbe a Cables length of the poynt of the Shingels, turne vp towards the Castle of V Vinchelzey, leauing all the shore or shoald markes on your starboard, then let fall your Anker in the River of Rie, called the Rother at 4. or 5. fatham: for the Cammer where in times past we were wonte to lie is now fowle & full of shoaldes.

These countries yeeld litle else but Wooll, Clothe, and Fier-Wood, Which are transported from thence.

The Ile of Wight as it appeareth when you sayle there alongst two leagues of
The needles
Poole
Eling
Hampton
Vpham
Tichfeld
Porchester
Falley
Lemington
Southwik
Portesmouth
Stansted
Southsea
Codlow
Arrundel
Chelsey
Shoreham
Sandwich baye
Shangels
Blanket
Cowe east
Ryde
The needles
Cassbrok
Newport
Steuen
WIGHT
Wotton
Culuer Cliff
Ellens point
Donnose
THE CHANELL BETWEENE
English leagues 20 in a degree
Spanish leagues 17½ in a degree
Dutch leagues 15 in a degree
Theodor de Bry

THE SEA COASTES OF ENGLAND betweene the Ile of Wight & Douer, with the principal hauens thereof according to their ſituation and Appearing *



THE SECOND PART

OF THE MARINERS MIRROVR

conteining in diuers perfect plots & sea charts boeth the Northern and Eastern

NAVIGATION: VIZ.

From thō Streights between Douer and Callis, the coastes of England, Scotland, Norway, Emden, Yutland &c. with all thō sounds of Denmark & the Baltick sea unto Wiburgh and the Narue.

With their particular descriptions traffiks and commodities.

A PERFECT DESCRIPTION AND POVRTRAICT OF THE CHIEFEST PART OF *England* viz. of *Thames* the riuer of *London*, and of all the sandes, bankes, flattes, and shoaldes vnto Harwich.

IF you come from the West, and will passe within the *Goodwin* to the foreland: first shape your course North north-east, and North and by east: and then the Windmill standing Westward of the foreland, appeareth on the West side of the valley, hold then on North and by East, vntil you haue brought the tower of the Foreland on the East-side of the sayd valley: and then are you on the North side of the Querns. The markes hereof are, When you see a little tower standing on the forelandes point, and an other on the Southforeland ouer against the third White downe at the castels side. But if you come from the North and will sayle within the Goodvvin, take heede you come no nearer the Querns then 7. fathã. Then setting the south Foreland from you South south West, you haue the best depth: When the broad Tower is brought into Ramsgate, you are then at the Querns: But when the Windmill appeareth in Ramsgate, or in the valley, you are then on the South of the Querns. But when you be at the downes, and the innermost corner of the cliffe be South SouthWest from you, then the Querns beare North and by East: and the North-end of the Goodvvin North-east and by North, and Northeast from you.

If you will sayle frõ Margate into the Thames, shape your course by north the foreland West South west: then holde on alongest the coast West, and West and by north to the Reculuers, where a ship that drawes much water must stay for the tide, to passe ouer the shoaldes called the Lastes betweene a buy and a beacon. Where is 3. fatham depth. From the buy set West north West, and West and by north towardes the Beacon standing northward, where you haue also 3. fatham water: and assoone as you are past that Beacon, it is but 2. fatham deepe at halfe floud: frõ thence plie West northwest into the channell: holde then for the most parte towardes the north shoare, because of the Norre, which reacheth down frõ the South shoare, and goe so foorth amiddest the riuer vp vnto Grauesend: But if you will backe againe alongest the North coast out into the Sea, shunne Blactaeil poynt before the middle shoald, afterwards plie Northeast, and northeast and by north vntill you haue brought a certaine Sharpe steeple in the middest betweene two others. The great spire steeple is called S. Matthevves Abbey. By these markes you may passe thorough the Spittes, within halfe a cables length off the shoare: then hold on alongest the shoare Northeast vnto the Nase, where two trees stand vpon a high hill: & when they are both in one, cond North Northwest, by the markes of Harvvich, vntill you come before the hauen: And from thence holde on northeast & by North to Orfordnesse, and so North Eastward into the sea. But when you shall be come to the Spittes, and the Beacon standing vpon the shoaldes of Shovv beare West Southwest. You are then in the Kings channel which lieth to the seaward North northeast, where at low water you haue 4. fatham.

If you will beare in with Harvvich, set the broad tower standing Westward of Harvvich in the wood, Southward of Harvvich, and enter northwest and by north, and north northwest, vntill you are cleare of the fishers stakes. Then turne in Westward or northward as you please, and anker in 6. or 7. fatham. About halfe a league from the northend of the red cliffe lieth the shoald of Bavvdsey. If you will enter neare Orfordnesse, hale along the shoare vntill Alborough lie north and by West from you, and then shall you be on the West side of VVhite Sand, and right against Orfordnesse hauen. From thence setting South and by West, passe by the shoald of Bavvdsey on the out-side: then hold on Southwest-ward, till you may see Harvvich open of the poynt of the hauen. Then commeth Bavvdsey to lie Westward of the red cliffe: Where is safe roade in 5. fatham. West northwest of Alborough lieth a shoalde called Abreknocke: from thence you haue vnto Galper 8. leagues South Southeast: And from Galper to the North foreland 4. leagues Southwest and by South, Where the tide from the north and South doe crosse each other alongst the coasts of England, Where also a north and a South moone maketh full sea.

In these coastes is very great traffique, but chiefely of English clothes, Wooll, tinne, pewter, leade, safron, sea-coles, fire-wood, and other commodities, which these countries doe yeeld. Contrariwise all kinde of salt-fish, and great store of linnencloth, and other merchaundises is brought thither from Holland, and Zealand, and there vttered and distributed.

I.

The lands or Coastes about Dower as you sayle through the Straight or betweene the heads
DOVER
St Margaret
Greanefend
Tilbury
Shelhauen
Cliff
Leighe
Thames flu:
Rochester
Shepey
Blacktaile
A
N
G
THE SEA
Coastes betweene Dower & Orfordnes: Wherein is conteined the most famous River of Thames with all the Sands, bankes, flats, & sholdes there abouts according to their trew Situation and appearing.
Whitstable
Reculuer
Quens Eliz. chan:
SANDWICH
The Lee
Birchington
Margaret
The Downes
The South forland
The Queens
S.t Peters
North Forlande
Knoc
S
Goodwyne
The
20
24

The Appearing and opening, of the land and coaste betweene the Thames and Orford hauen When you sayle on the out side of the bankes

THE NORTH COASTES OF ENGLAND BETVVEENE VVALDERS-wicke and *Burnham*, withall the banks and shoalds.

WHen *Eſton* beareth Southweſt and by South from you, then are you on the Northſide of Couehith ſhoald. But when Keſland lieth Weſt North-Weſt, you are on the South-ſide of that ſhoald. When Leſtofs tower ſtandeth SouthWard of the tree, you are then on the Southſide of the banckes of Leiſtofe. If you will anker on the South of Leiſtof, borrow of the ſhoare at 4. fatham, till the tower be Weſt, and Weſt and by North from you, where you may caſt anker in 4. fatham water. But if you will goe thorough the narrow places within the bankes to the brew-houſe, giue it a little birth of the ſhoare: then edge NorthWard, and North and by WeſtWard, and anker in the North road before the brew-houſe, at 6. or 7. fatham. And if you will out to ſea thorough the ſhoaldes, bring the brew-houſe and the windmill in one, and croſſe ſo thorough the ſhoaldes. But if you will holde on your courſe towardes Yermouth, keepe Suthon ouer againſt the North head or pierre, and the great tree ſouthWard of the flat church, and hold on ſo straight by yermouth ſhoaldes called the Holmes. NorthWarde of the Hauen of Yermouth lieth a ſhoald called Middle-platt: at the Weſt ſide thereof you haue 7. fatham water. Not far from yermouth lieth an other ſhoald called Rocklyn 9. fatham deepe, which you may paſſe by on both ſides to the ſeawardes. There alſo ſtandeth a broad tower on the Northſide of yermouth, lying inwardes from the ſhoare: When you haue brought the ſame to the Southend of the wood, you are then on the North part of yermouthes ſhoaldes.

If VVynterthon beare South ſouthWeſt from you as you come from the North, you are SouthWard of the ſhoald of VVinterthon. Thence borrow of the ſhoare at 3. or 4. fatham, till you come SouthWard of Rocklyn. To the EaſtWard and Eaſt and by NorthWard of yermouth beyond the ſhoaldes lieth a newe bancke, which hath beene there but theſe 3. or 4. yeares paſt, being of 2. fatham deepth, but aſWell on the North as the Southſide you haue there 20. fatham water.

Blackneie is a bard hauen, you muſt enter along the ſhoare, and in the entrie lie Buyes. BetWeene Blackneie and VVelles lieth a ſhoalde called the Pol and Peper: At the Weſt ſide of this ſhoald is the channell of VVelles, which hath alſo Buyes in the entry. Burnam ſtandeth 4. leagues WeſtWard of vvelles, where is ſhallaw water, and the flats ſtretch farre into the ſea. Burnam channell lieth inwardes by the ſhoare, and hath on the Larbord ſide, as you enter certeine Beacons. To the WeſtWard, lieth an other roade or channell of 3. fatham depth called burneham pits: about 3. leagues thence to ſeawardes you haue but 2. fatham water. If you will ſet towardes Linne, goe hard vnder S. Edmunds Chapell, leauing the ſhoalde called the Suncke, which lyeth aboue water a ſeabord of you, then holde on your courſe South and by Weſt to the firſt Buy that lieth in the entrie of Linne.

The commodities and traffique that theſe coaſtes yeeld is Wooll, Cloth: and in ſome places, Wheate, Barley, Malte, Beere, Herringes and Sprattes: In exchaunge Whereof much Salt Fiſh, and Linnen Clothe is brought thither, and vented eſpecially at Linne.

After this manner appeareth the North Coast of England when yo

ng on the out side of the bankes ther alongst
Hasborow
Cromere
SNETSHM
S Edmund chap
Clay
Blakeney
The Sunck
The Welle
Burnhm Pitts
BURNHM
Burnhm sand
Welles
Blakeney
Clay
The pole and prpre
ST OF ENGLAND
Sherringhm
CROMERE
Waxhm
Hasborow
Hasborow ness
Binche bawell
Vintertons bankes
South West
South
West
North West
North
South East
North East
East
SEA

FPJCB

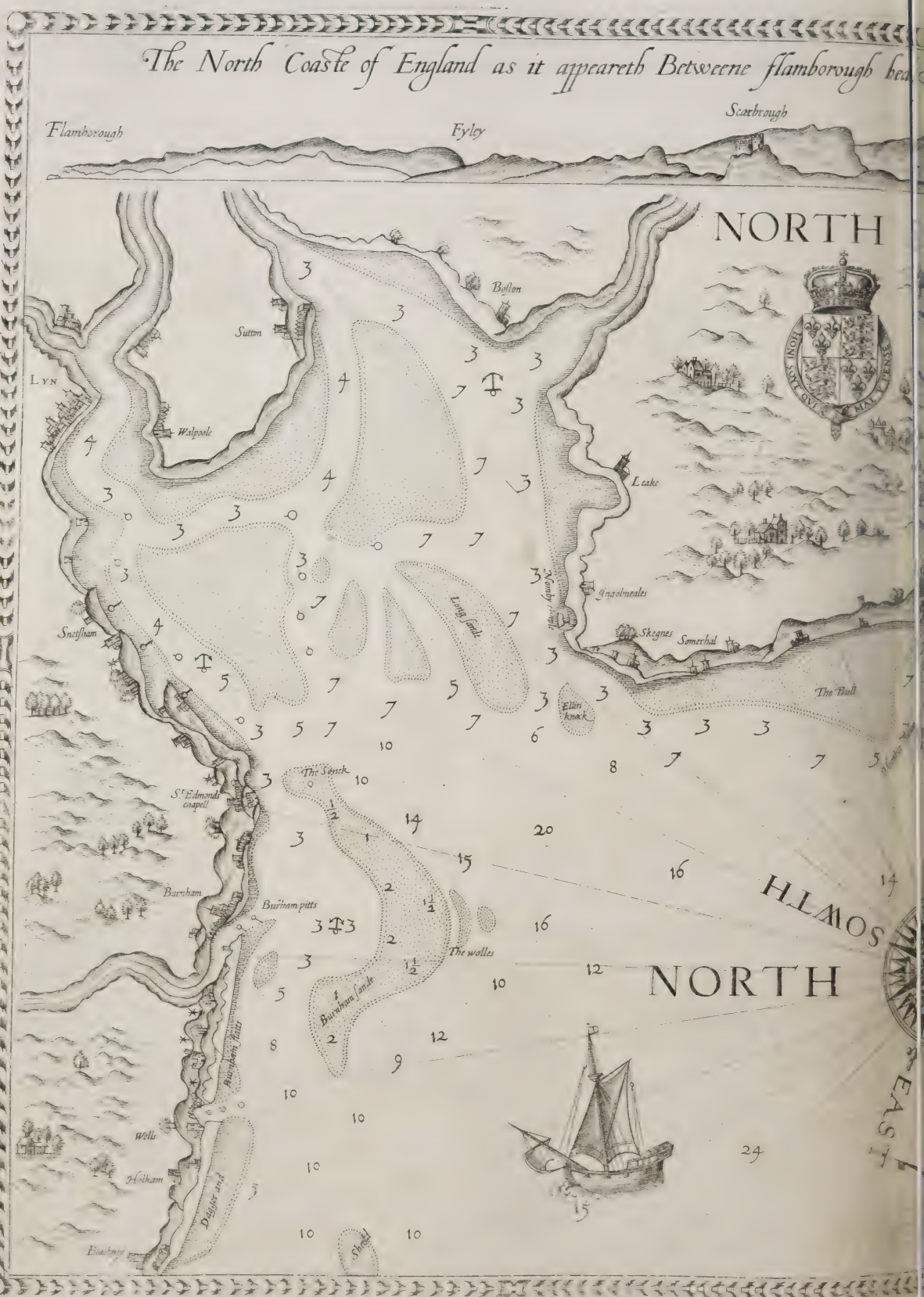
AN EXACT DESCRIPTION
OF THE COASTES AND CHANNELS OF *Linne, Hull, Filey, Scarborough,* with the ſhoalds and *banckes adioyning.*

IF you will ſaile from *Welles* to the hauen of *Lynne*, keepe the high flat tower betweene the two other high towers, then are you in the right way to Lynne. When S. Edmunds Chapell beareth East from you, and the trees that ſtand vppon the innermoſt point doe come on the weſt ende of the Chapell, then ſhape your courſe in Southeaſt, and Southeaſt and by South towardes the firſt buy: for now are you entered the Eaſterne channell of Lynne: from thence hold South ſouth-weſt, and South and by Weſt to the firſt Beacon, from thence to the ſecond South SouthWeſt, and ſo forth vnto the third SouthWeſt and by South. Then your courſe lieth by two buyes SouthWeſt, and SouthWeſt and by South, till you be within the point of the Land: from whence you may conde betweene the ſhoaldes to the weſt entrie or channell, and out againe by the Buyes and eye markes. This channell lyeth to the ſeawardes Northeaſt, and Northeaſt and by East. But if you will enter Boſtons channell ſet towardes the coaſt of Skegneſſe, beare in hard abord the ſhore, and you ſhal be cleare of the ſhoald called the Droſing or Ellen-knocke. When you haue brought the three trees SouthWard of Somcall or of the ſharpe ſteeple, then Ellen-knocke. ſtandeth ſo ſeawardes from you. And then may you beare vp alongeſt the coaſt of Leake in 3. fatham water into the riuer of Boſtone. But you may returne backe agayne to ſea betweene Ellen-knock and long ſand, in 3. fatham water East Northeaſt.

And if you will enter the channell of Humber, hale in alongeſt the Northerne poynt of Sprunhead, becauſe the Southſide is flat and full of ſhoaldes, but beeing entred a little way, borrow of the other ſide of the riuer towardes Grymsbie within the ſhoald, where you may ride in 6. or 7. fatham. But if you will goe farther in vp to Hull, keepe on weſt northWeſt alongſt by the Southſide to the furthermoſt ende of the ſhoalde: then turne NorthWard into the riuer, where after you are entered, you muſt hold Weſt SouthWeſt, and Weſt and by South.

Bridlingſtone is ſcituate in a bay, where is ſafe harborough for a North and a NorthWeſt winde. Three leagues to the NorthWard of Flamburgh lieth the bay of Filey, where you may ſafely anker for a North Northeaſt winde, betweene the Peere, and Filey bridge, (which is a rocke that lyeth vnder water at a ſpring tide.) Scarbrough beareth two leagues northward of Filay, and hath two peeres, wherein you may caſt anker, and lie on the ſand at low water.

The traffique of theſe partes is Barly, Malte, Wheate, and courſe Cloathes.


The North Coaste of England as it appeareth Betweene flamborough hea
Flamborough
Fyley
Scarbrough
NORTH
Boston
Sutton
LYN
Walpoole
Leake
Gingolmeales
Skegnes
Somerhal
The Bull
Snetsham
Long sands
Ellin knock
The Sench
St Edmonds chapell
Burnham
Burnham pitts
The wolles
Burnham sands
Wells
Holkam
Blakeney
NORTH
SEA

when you sayle there alongst twoo leagues from lande

hoods bay

Whitbye

Hontley foote

STES OF ENGLAND

A DESCRIPTION OF THE SEA COASTES of England Betweene Burnam & Scarborough as that land and coast lyeth & appeareth,

HVLL

Winingham

Caingham

Scarbrough

Hornsey

Bridlington

Tyley

Fyley

bridg

Flamborough

Flamborough head

Dunnilton

Withrinsey

Oathorn

Waxholm

Systerkirke

SEA

NORTH

English leagues 20 in a Degree.

Spanishe leagues 17½ in a Degree.

Dutche leagues 15 in a Degree.

A PERFECT DESCRIPTION

OF THE NORTHERMOST COASTES *OF ENGLAND, WHERE THE RI-* uer of *Newcastle* is the chiefest hauen.

FRom *Scarborough* to *Whitby* you haue 4. leagues North west and by west, the Hauen or Riuer is barde. Southwardes of the Hauen stretcheth out a Shoalde half a league into the Sea. If you will sayle to VVhitby, beare in betweene two beakons, till you come betweene two landes, where you shall finde it somewhat shallow. Hertlepole lieth from VVhitby. 7. leagues, Westwarde thereof is a great Bay or Riuer called the Teis. It is a very fayre Hauen and stretcheth inwardes to the West southwest. In the very middest of it, you haue 30. fatham water, but farther inwardes before Sockton, not aboue 4. fatham.

The Cape or point of Sonderland lieth seuen leagues northward from Hartlepole. Two leagues from thence more Northward is the castle of Tinmouth, on the Southside of it is the mouth of the Riuer of Newcastell. The markes to enter are, When two Watche Towers, and the Wood are brought in one, by these marks you may saile in and out, vntill you come before the Towne, where you haue 3. fatham and a halfe. But in the entrie only 2. fatham at halfe flood. Cocket Iland is 7. leagues from Tinmouth North North west, which you may sayle rounde aboute, and may cast Anker safely at 4. or 5. fatham.

In these Coastes and specially at Newcastle is meruellous great trafficque for sea Coles, which are transported thence to other Countries. It doth yeald also Barley, Wheate, Malte, and course Clothes.

The Coaste of Huntley foote and Redcliff when you Comme from the Northe
Huntley foote
Redd cliff
Trees
Appearing & opening of the West coaste of When you Sayle there alon
Eslington
NORTH
COASTE
THE CARDE OF the North coaste of England from Whitbye vnto Coket Ile
Gisbroghe
Stockto
Tees fle.
Hartlepoole
Redd cliff
Huntley foote
Skelton
Whitbuy
Robinhoodes Bay
NORTH
MERIDIES
25
30
35
40
20
28

as it sheweth

The North coast of Tynmouth Castel as you sayle there alongst vnto Coket Ile

Newe Castel Tinmouth Castle Seaton Newbiggin Warkworth

Coket Hland

OF ENGLAND

Heworth

Sonderland

Tynmouth

Tinmouth Castle Seaton Newbiggin Warkworth

Coket Hland

SEA

SEPTENTRIO

English leagues 20 in a degree

Spanish leagues 17 ½ in a degree

Dutch leagues 15 in a degree

A TRVE DESCRIPTION OF THE SEA COASTES BETWEENE Bambourgh and Aberdyne.

Holley Islande beareth 4. leagues North North west from Coket Isle, and hath in the South-side therof a Bay wherin is salfe roade at 3. or 4. fatham, but best riding is before the castle. Betweene the West poynt of the Staples and Holy Islande are 2. Rockes, one oppolite to another, called the Plough, and the Goldstone. Bring Dunstabourgh one with Bambourgh, and so saile out betwixt them. Barvvick lieth from thence fiue leagues West northwest: if you will enter the hauen set the two Beacons on your starboord, and so holde on to the citie: from thence fiue leagues North northwest lieth S. Tabbes head. The Isle of Basse is foure leagues distant from S. Tabbes head, West northwest: whither from the farthermost poynt of the Staples you haue 6. leagues Northwest: From S. Tabbes head to May Island, foure leagues northwest and northwest and by north: From May to Fisnes one league Northeast and by east. Basse beareth South West & south West and by south from May, two great leagues, and but one from the Westerne shore. Brant Island standeth to the Westward, and West & by northward of Bass three leagues, by the south side of which you may sayle. Three leagues Westward of Brant Isle lieth Edenbrough the chiefest mart of all Scotland.

S. Andrevvs Bay beareth northward of Fisnes, Where is salfe harborough for a Western wind: from S. Andrevvs three leagues northward lieth the riuer of Donde Which stretcheth directly in from the sea: & may anker before the citie of Donde: A litle farther in standeth a towne called S. Iohns: there lieth also a rocke called the Scaepe before the riuers mouth about halfe a league off the shore South eastward from Donde. Two leagues to the North Eastward of Donde standeth a high tower vpon the point called Albrot: from whence lieth the hauen of Manros two leagues to the northward: Where on both sides is cleare ground: and you may safely enter amidst the channell: and turning vp northward may anker before the citie: from Manros you haue three leagues Northeast-ward to the cape or poynt called Seynhoofe, whereon standeth a castell. And two leagues Northward from thence lieth the porte of Aberdyne: the West side is foule, but Eastward it is good and faire, enter therefore hard a bord the East shoare, till you come into the hauen: in the entrie there is 3. fatham Water, and you may anker before the citie in 4. or 5. fatham.

From these coastes are transported course scottish clothes, frises, sea coles, and some barley and malt, Which are the commodities of those portes.

V.

The Appearing of the Northermost coaſte of England, when you ſayle there alongſt
Dunſtabourgh
Bambourgh
Barwyck
Edenburgh
Leith flu.
S C O
Sethon
Hadingthon
Brande
A DESCRIPTION OF THE
coaſtes betweene Bamburgh & Aberdeine
whereof Edenburgh is the chiefeſt marttowne
Baſs
Dunbar
Barwijck
Churlyd
Goßwick
Dunſtabourgh
Bambourgh
St Tabs heade
MERIDIES
Holy Iland
Gold ſtone
The Plogh
Farneſlands
Staples
NORTHER

Scotland, right ouer against Edenburgh or the North side thereof

T I Æ P A R S

RPJCB

A PERFECT DESCRIPTION
OF THE SOVTHERMOST PART OF *Norway*, and of the coasts adioyning.

IF you will saile into the *Naze* of *Norway*, enter Westward thereof North northwest, leauing the rock called the Bishop boden on your Larboord, which lieth in the midst of the Channell: Beyng cleare of the same you must carefully as you go inwards beware of another Rocke that lieth vnder water: but within it you shall cast anker right agaynst a white Church. If you will enter on the west side of Maensounde sayle in North north east, but shun the Rockes, which lie vnder water on the starboorde, about the innermost Isle. And beyng cleare of them, anker in .9. or .10. fatham.

But if you will enter the Clooffe, keepe the Cow and Calfe North north east from you, and sayle in Westward of Melou, but shunne the rocke which lieth in the fayre mid-way. And let fall Anker in 15. or 16. fatham by the West shore within the poynte, and on the East side of Melou, you may goe to Schaersounde and Oedendale.

If you will beare in with the Western hauen of Vlecker or Flecorie, Conde a longest the out Schaers of Heiligen sounde: and when the Bay of Vlecker openeth before you North north east, then hold in betweene the Island and the maine, anker in 15. or 16. fatham agaynst the Rocke, whereon standeth a payre of Gallowes. The Eastern entrie stretcheth inwardes West northwest: and you may see the Bay called the Vos open before you: Set al the black rocks on the starreboord, and the rock with the two high stone beacons (which are called Warders) on the Larboord-side, and so saile inwards. But if you will set towardes Repervvicke, keepe the two sharpe rockes standing vppon VVolfsound on the starboord, and the three Warders, with all the rocks on the Larboord, and continue your course so in Northward: but being cleare of the poynt, turne vp Westward where you may anker in 10. fatham.

The Easterne entrie of VVolfsounde stretcheth inwardes Northwest, you must leaue the great rocke to the Westward, whereon standeth an high Warder. In the Isle of vvolfsounde are three Warders, turne in Westward, where you may anker in 25. fatham, you may also passe betwixt the rockes to Old Hill sounde which lieth inwards West Northwest.

Amersounde lieth North north-east in, and you may anker behinde the Island, neare vnto the high Warder 30. fatham depth.

The Easterne gate or entrie of Amersounde lieth northwest, and southeast, Westward thereof standeth a rocke with a high Warder on it.

The Isle of Hesnes hath two Warders vpon it: It is there very deepe, but towardes the litle church is not so deepe, viz. 30. fatham. You may sayle within the rocks to Mardou. And when the little hills or Holmen are northwest the you are before Mardou. The Isle of Mardou hath two high Warders vpon it: holde on betweene the Nie-Holmen and the Island (where lieth also a suncken rocke neere vnto the sayd Isle) And being past the poynt, edge North northwest into the great bay, and anker therein 30. fatham. You haue in the Easterne entrie of Mardou but 3. fatham water, and it lieth outwards and inwardes East northeast, and West Southwest. Being within the Island, you may cast anker in 12. or 13. fatham.

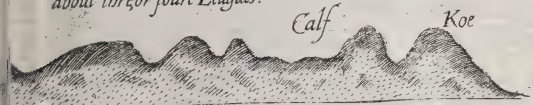
From all these hauens are transported great store of Oken beames, rafters, railes, and all kinde of Oken Woode and timber: and some salted boordes and planckes, which in the lowe countreyes are much imployed in buildinges.

Walbert
The fedder
Appearing and opening of that parte of Norweay, w: E lyth
Serenoch
Syrnuh
Appearing of the sayde land, betweene
Ekesondt
Thus openeth the Noss when it is west from you twoo Leagues.
thoge landt
te Leest
De roos steuren
Barth
sondt
Winsoert
Wintersondt
ilage landt
te lyst
N O R
English Leagues 20 in a degree
Spanishe Leagues 17½ in a degree
Dutche Leagues 15 in a degree
Galmesel
Selloer
Maensondt
Der Noss
Calf
Koe
Helghen sondt
De vos
Vlecker
De cloof van koe en calf
Melon
Schaer sondt
Heyligen
Heyligen sondt
Tronsfer gat van Vlecker
Eylandt van
NORTH
WEST
SOUTH
EAST
N O R T

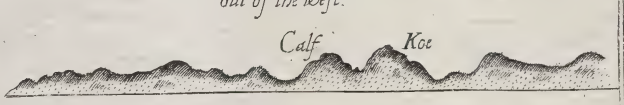
& Vlecker as you comme out of the west foure Leagues of

lou foure Leagues of likewense, comming from the west.

Kow & Caffe when it lyeth north and by East from you. about three or foure Leagues.



The sayd Caffe and Kow may you knowe thus when you comme out of the west.



G I Æ P A R

The Sea coastes of Norway as they doo appeare according to their Situation betweene Der Noess & Mardou

A PLAINE DESCRIPTION

OF THE NORTHERNE PARTES OF THE *EASTERNE SEA COASTS OF NORway*, and the countries adioyning.

IF you wil enter *Tromsounde* you may saile in beyond *Mardou* through the faire channell, on the Northside stande two Warders vpon a high hill, where you may let fall anker, or sayle on farther to Mardou behind Trom Iland.

If you will beare in with Oxefoort, keepe alongst vnder the rocke of Tromsounde, and goe first Northwardes: and hauing brought the long rocke on the Larboord, hold on still Northward: When you are a little way entred you shall finde a rocke vnder water, in the very entry, which you must bring on your starboord, then continue your course vntill you are cleare of the Westerne poynt: Where also lyeth a rocke vnder water neare the poynt. And from thence sayle to the West, and West and by North towards the high land, to the Easterne shoare. Where standeth an high Warder where you may anker in 20. or 25. fatham.

Betweene Oxefoorte and Santfort lieth Longen, on the Easterne side standeth a mast with a tonne on it: hence off two leagues is Santforde, thwart which alongest in the sea lieth a banke which in some places hath but 3. or 4. fatham water, and endeth about V Vest Kiell. V Vest Kiell lieth in Northward, and you may enter hard by the out rockes of Iofferlande, and may sayle about the sayd Iland or anker behinde it in 15. or 20. fatham. Longsande beareth from that Iland a great league North northeast. Kinges hauen stretcheth inwardes North northwest where is 30. fatham sounding: hale inwardes alongest the ragged poynt from whence the rocke called the Baers lieth not farre: but if you would goe to the Nesse being cleare of the great rocke whereon standeth an high warder on your starboord, you may sayle betweene the old Longsande, and the sayd rocke through into the Nesse passing by the ragged Isle: and anker there in 20. or 30. fatham.

From Longsande set East northeast to Farder, betweene which lyeth Larvvicke, Stavvangen and Tonsbargen. But Bast beareth Northward from Farder. And from thence shape your course to Anslo, Copervvicke, and Soen vvater, and so forwardes thorough the rockes called Lammeren to Braekenes which is a shallow ruer towardes the sides, where most part of the firre borde and timber is salved.

Rogh point lieth foure leagues North northeast from Farder, the rockes called the Sisters are 3. leagues Northeast and by North from Farder. The Isle of Akersounde is distant from thence 5. leagues to the Northeast. In these partes lie the hauens of the Northeast countrie, where nowe a dayes is the chiefest taking of herringes, which was woont to be in Malstrande.

From all these hauens come deale bordes, great and little masses, rayles, rafters, timber to make hoopes, fire woode and such like stuffe fit for building.

The Shewing of the land of Norway betweene Mardou & Langhesond, when you comme out of the East about
De vos van Mardou
De voort-vã Trom
Mardou
From
Oxefoort
Longen
West kiel
Oost kiel
Conincx hauen
Stadt
Sent voort
Gat van west kiel
T'loffer landt
Gat van Oost kiel
De boers
Tromsondt
Gat van Longen
Gat van Oxefoort
Gat van Mardou
Wieu holmen
WEST
SOVTH
English Leagues 20 in a degree
Spanish Leagues 17 1/2 in a degree
Dutche Leagues 15 in a degree

Appearing of the Land of Langesond, foure Leagues of, Coning from the west
Long Sound
Debuij
Anslo
Holm strant
Braecke nes
flerwic
Kael-eers
Kalbyn
Poelsche gronden
Lausondt
Bast
Bast
Soen water
Soenwater
Schipshil
Wijste
outsoen
Mossont
Maric enboe
Neess
De neese
Vuyle hoeck
Tonsbargen
Haer wyck muyhol
Stavangen
De Larwyck
Seyman
Fmonnicke Eylandt
I. de Slecht
De bodem
I. Roghe
Elsanghe
Grasewyck
De Stuyfers
Farder
I. Akersondt
Mars grondt
Tlandt van Noordt Oosten
Noorder Meu holm
Suyder holm
Boechscheer
The Sea Coastes of Nor-way And of the lartd of North-East, as they shewe and appeare bet weene Mardou and Akersond, accor-ding unto their right situation
ERN SEA

AN EXACT DESCRIPTION
OF THE NORTHEAST COVNTRIES,
where *Malstrande* is the cheefest Porte.

IF you will saile from the cape called *Schagen* or *Scaw* to Masterlande, shape your course East north east, till you may discouer an high round rocke or hill, called Bretto: towards which you must beare East North east, till the rockes called the Pater nosters be in sight, which you shall leaue on your larbord: And when you shalbe nigh the shoare, the entrie of Masterland will be open before you on your South side lying Eastward and East south eastwardes: And leaue the Island wherin standeth a beakon or warlocke, on your starbord. But when you come to the poynt, then the citie lieth open before you, make fast a Cable to the Kay, and cast Anker to the Seawards. You may sayle out agayne Southward into the mayne two or three wayes.

If you will beare in with Calfsounde enter harde aborde the great Rocke wheron standeth a high warlocke: you may by holding on the same course, sayle into Coyhell and Bahuys: you may also set forwardes to the Riuer of Nilues: called V Vinder, betweene the Rockes, wher on the East side you haue the mayne, and the channell lieth open before you. Right before the Riuer lieth a ragged Island, which you must leaue on the Larborde. You may anker vnder the same in 15. or 16. fatham, the hauen is called Reefsounde.

Two leagues Eastward of Reefsounde lieth the Island Malesounde which you may sayle rounde about. Consbaeke lieth from thence two leagues to the East north eastward: Monstersounde standeth also on the East-side of the hauen: and from thence V Vaersberghe lieth 3. leagues to the Southward.

If you will sayle to vvaersberghe, bringe the Castle which standeth in the mayne lande South of you, and holde on thorough the middest of the channell betweene the Island and the Easterne shoare, but edge nearer the island because of the rocke vnderwater that stretcheth out from the eastern poynt.

There is also a blinde Rocke at the poynte of the Island, when you are cleare thereof you may borrow of the Northern shore, and there come to anker, for it is broade and 4. or 5. fatham deepe.

Parte of these Coastes doo belonge to the gouernement of the Kynge of Svvedeland, and parte to the Kynge of Denmarke. Their traffique is all sortes of Tallow, and such grosse wares, Skines, Hides, Barly, and great stoare of Filberd-nuttes.

The opening of the Land of ye North East, when you will sayle into the Vol, and that the same is ye
Distelberch
Langherh
Britto
Noorder meu holm
Suyder meu holm
Buech Eylant
Distel berch
Harmsort
VAN
Britto
Noorder meu holm
Harmen hoogh
Pater nosters
NORTH
A MOST PERFECT description of the Sea coastes of the North East land parte of Norway part of Swedeland as it lieth betwene Distelbergh and Waersbergh
THE SEA
WEST
English Leagues 20 in a degree
Spanish Leagues 17 ½ in a degree
Dutche Leagues 15 in a degree
Triff
Schagen or Skaw
THE BELT
NORTH SEA

from you

Tlandt van Waersberghen

OT

Nylues

OOSTEN

SWEDIAE

PARS

Babuus

Winder Auuus

Koybel

Elsburck

Consback

Waersberghe

Kalff sont

Tslott Ref sont

Monster sont

Buyhuys

Tslott

Male sont

Nyding

Tgat van Nylues

Tgat van Babuys

Tgat van Male sont

Tgat van Monster sont

Tgat van Waersberghe

EAST

POL IN

SOUTH

Triff

Trijndel

Triff

Aenhout or Arnold

Iesour

A PERFECT DESCRIPTION

OF THE PRINCIPALL PART OF *DEN-marke*, where ſtandeth the famous citie of Capen-hauen, *the cheefeſt place of the kings reſidence.*

NOrth-eaſt and by North of *Coll*, lieth an Iſland called *Swedero*, which is like an hauen on the inſide, but it is open on the North-ſide. If you cannot goe cleare of Coll, beare boldly with the ſayd Iſland, & hold on ſtreight within the great rock neere the church, where you may anker in 10. fatham and ride ſafely. From Anholte ſet South ſoutheaſt towardes Zealande. And if by reaſon that the winde hangeth Eaſterly you cannot get into the Sound, hale alongſt the coaſt of Zealand, on the backſide of Haſelin, where is good ground in euery place for ankering. There is alſo a great bay which is a good harborough ouer-right alongſt the coaſts of Zealand for a Northeaſt winde, where is 5. or 6. fatham water.

To ſaile into the Sound, hold Southeaſterly in from Coll, but bring not the Iſle of VVeen open of Elſenoers caſtell till you are cleare of Svvynebode. Then may you paſſe by Lappelande thorough the middeſt of the channell: and being paſt the caſtell anker where you liſt. Towardes VVeen are certaine places where is good riding in 7. fatham water, but it lieth farre from the ſhoare.

If you ſaile from the Sound to Coppen hauen, being come to the ende of the Wood, you may ſound the whole channell as you go vpon 5. or 6. fatham, and not faile to find the Buy: but keep ſtill in 5. fatham. When the tower of Coppen hauen is South-Weſt from you, then are you come neare the firſt Buy, where you haue 7. fatham on the Eaſt ſide: holde on from the Northerne Buy to the other, South & by Eaſt: bore row of the Weſterne coaſt, if the wind hang Weſterly, in 6. or 7. fatham, where you haue alſo 9. or 10. fatham water. Set Southward frō the ſecond to the third Buy, for there haue you 10. or 11. fatham & then are you right againſt Southolme, where it is ſhallower and narower: from thence continue your courſe ſouth, to the Buy of Caſperkine, where is 7. fatham water. The Fiſher lieth from the Buy in Caſperkine Eaſt and by North: the Weſt ſide thereof is very ſhallow. Your courſe from Caſperkine to the ſhoald or ſand called Drakerriff is South, where a Buy lieth in 5. fatham water: but from Drakerriff to Steden South and by Weſtward: and then haue you ſometimes deeper ſounding. But when you are betwixt Steden and Falſterborne, and the flat broad tower of Falſterborne be one with the caſtell, then are you at the poynt of the Riffe or bancke where lieth a Buy in 4. fatham depth: and there begunneth the Eaſterne ſea called the Belt: and may ſhape your courſe thence Eaſterly towardes Brontholme. If you will backe againe from Steden towardes Draker, when you come neare Drakerriff, if the tower of Coppen hauen appeare on the Eaſt ſide of Draker Wood, bring Draker North and by Weſt off you, ſo ſhal you go cleare of the Riff. And when the tower of Coppen hauen is to right a ſhips length Eaſtward from the Wood, you are thwart of Drakerriff Buy: Where you haue 5. fatham water. Your courſe from Drakerriff to the Buy in Caſperkine, is almoſt plaine North, where it is about 6. or 7. fatham deepe, and there the channell is narrower. But from Caſperkine to the other three Buyes, ſet North, and north and by Weſt, where you haue 10. 9. 8. or 7. fathā water: When Coppen hauen is South-Weſt, then are you come to the North Buy. The eye marke of the other Buy, is, When the broad tower ſeemeth to be a ſhippes length off from the great Church of Coppen hauen: The third Buyes marke is when the broade and picked towers are one. But the marke of the Buy in Caſperkine, is when the ſharpe tower commeth ouer againſt Coppen hauen caſtell.

All the traffique of theſe coaſtes dependeth moſt of Mault, Barley, Nuttes, and ſtore of ſome kinde of Tallow and Fatt: the Herring ſeaſon there, is now little Worth, Which heretofore hath bene very great.

IX.

Kol
Snijneboedt
Elsenborch
Landtscroen
Engelholm
Sigelholm
Laholm
Helmste
Bosstaed
Halmsto
Tureke
Valckenborch
Hauer
Tuyle
Swedera
MARE VVSGA
Snijneboedt
Hoegenes
Kol
Krapperup
Lappesandt
RITER DEPOSITION
NORTH
EAST
SOVTH
WEST
Trif van Aenhout
Aenhout
Haeselyn

Sea Mappe of the Sond, the most famous part of whole
nmemarcke eũe as it appeareth on both the sides when you
yle amiddes through the Channell from Waersbergé unto Fal
boë. Where the Easterne Sea beginneth

The shewe of Zeland as you come from the Northe

AN EXACT DESCRIPTION
OF *BLECSIDE* AND *CALMERSOVNDE*
lyinge at the entrance of *Swethlande*.

N the *Erthholmes* there is a Hauen of 4. fatham depth. If you will set out from Santvvicke in Bornholmes towardes Ahuys, shape your course North and by West towards Hano. Hano is a rounde Islande, and hath rounde about it good grounde for ankeringe. From thence holde on North north West to Ahuys which lieth by a litle Riuer. Their comodities and trade is Maulte, Barlie, and all kinde of grosse wares (viz.) Pitche, Tarre, Tallowe, Hides. &c.

If you will from the East ende of Borneholme, to Kalmer, sayle from Borneholme North north east, towards the Rocke which lieth from thence 14. leagues: then holde on to Kalmer, first to the North-warde and North and by West-ward, but beyng cleare of the Riffe or shoald called Suydernorte, Calmersounde stretcheth inwardes North and by East vp to Kalmer, vntill you are cleare of the straight passages of the Rockes which lie before the towne. And from thence plie to the hil called Svveers Yunckfrovv, north north east, and North and by East.

Suydernorte beareth towardes the West poynte of Oelande: From whence stretcheth a fowle rockie banke or riffe, South and by West, a league and a halfe out into the Sea, and in the fayre way by the South-side of Oelande, you haue 28. or 31. fatham water about 3. leagues from lande. The Isle of Oelande is longe and narrow, and hath 18. flat towers.

The trade of Calmer, and the countries adioyning, is Tarre of Svvedelande, all kinde of Fells, and Skinnes of Wilde beastes, Salt, Hides, Goates skinnes, grosse wares, and some Brasse and Iron.

Thus appeareth Bornholm, when you comme from the west
Eertholmen when they lye North noorth East from you
DENEMARKE
The Sea Coastes of part of Denmarke and Swedeland from Vuytste to Calmer
Ahuys
Somer hauen
Vuytste
Malqueren
Ilano
Santhamer
Santwyck
BORN HOLM
De Eert holmen
Snanck nex
EASTER

lmen when they are right East from you
Oeland when it lyeth thwart ouer against you
E D E L A N D
eleholm
Kalmer
Rottumbay
Stuboon
Tslot
Kalmer Sondt
Ouyt dippe
SEPTENTRIO
OELANDT
Tcapel op Suyder noorden
Suyder noorder
Septentrio eurus
ORIENS
S E E
Englishe leagues 20 in a degree
Spanishe Leagues 17 ½ in a degree
Dutche Leagues 15 in a degree

RPJCB

A PERFECT DESCRIPTION OF WESTERWICK ABOVT THE mount of the Swethish *Yunck-frow*, the beginning *of the rocks called the Schares of Swedeland.*

THe mount called *Sweetse Yunck-frow* or young mayden, beareth 8. leagues from Calmer N. N. E. and North & by East: and Silbuy is the first hauen within the Schares, from whence you may set betweene the Schares to V Vestervvike, Flerbuy, and schelsheuer: for your way is fayre. The entries of Stockholme lie 18. leagues from Svveetse yunckfrovv North north-east: and the coast of Stockholme turneth by East. The entries stretch inwardes, first North-east and by north, and after North north-east to Durhauen setting the rocke called V Vigsteen on the Larbord side, and the middle steene on the starborde. The rocke which is called the redd Cowe lieth two leagues within the entries. And the entries of Stockholme lie inwardes from Durhauen for the most part North West, North-west and by West, & North and by West to V Viexholme. Within the Schares of V Vestervvicke is euery where good anker hold in 16. or 20. fatham.

The foresayd hauens are subiect to the king of Svvedelande, and in a short time are growen so welthie that now there is great traffique of all kinde of commodities viz. of Tarre, Barley, Mault, diuers sortes of skinnes and other marchaundizes, besides grosse wares and nuttes, but chiefly Iron and Brasse.

The famous Isle of Gothland part of the dominion of the king of Denmarke lieth vpon the coastes of vvestervvicke or Svvedelande, and is about 10. or 12. leagues off the shoare. The notablest port thereof is V Visbuy a citie in time past the marte for many countries, and much haunted by reason of the intercourse of factors, where al lawes concerning seafaring and sea rights were established and ordeined: but the Islande beeing impouerished and vtterly destroied by cruel Wars, at this day lieth by husbandry. Notwithstanding there is still some traffique of Pitch and Tarre. It conteineth in length eighteene leagues, and in breadth fiue: hath eighteene villages with speare steeples. It tooke name of the Gothes, which did once inhabite it.

Westernwick
Schelsçuer
Boot
Fluerbuy
Frouren kerck
Sylsuy
SVEDIÆ
PARS
Stockholm
Kalmar
SWEDEN
Kalmar sondt
Sweetse Iunckfrou
OLLANDT
SOUTH
South-West
South-East

Suuer Corppen
Noort Corppen
Honsbay
Stickborch
Groen Eylandt
Englishe Leagues 20 in a degree
Spaniſhe Leagues 17 ½ in a degree
Dutche Leagues 15 in a degree
SMA
LAND
Telghen
Melle Sauus
20
30
NORTH
SEA
Hartſbals
Landts oort
Tgatt na Stockholm
Wigsteen
Roo koe
Karmasen
Middel steen
Gammersteen
Scheeropenum
North East
40
35
50
West
GIST

A PLAINE DESCRIPTION

OF THE SEA COASTES BETWEEN *Weiburghe* and the *Narue*, the farthest partes of the Belt, with their situations and commodities.

THe Isle of *Somer* beareth 9. leagues from *Hogelande* Northeast more Easterly. But your course from Hoglande to the Island called Putsfager lieth NorthWest ¤ by north: From thence you may sayle within the Schares of Swedeland where you list. From Putsfager set toward Somer East, and East and by South: and from Somer towardes the Island called Red Hell North east, and north east and by north: you haue two Rockes on the Larborde in the very channell, called the Eastern and Western Fishers. From Red Hell to Tralesande it is counted 2. leagues almost Northeast, from whence you must goe crossynge northeasterly in and out from Beaken to Beaken till you come to V Veyburgh, where the Eastern sea endeth. The Isle of Somer lieth neare the coast of Rusland, hauyng right agaynst it the Schares of East Finland.

The Narue beareth 10. leagues from Somer South east: leaue the Isle Tutters on the starre-borde side: When you come neare the Narue, you shal descerne a Maste with a Barrell on it vpon the strand, keepe that right ouer the Woodden castle, and holde so alongst the shore into the riuer of Narue.

The Narue is knowen by the rounde hilles SouthWard of the Roade: and you haue from thence vnto Eackholme 14. leagues northward. About the North, and North and by EastWard of Telsbourgh lie the Rockes of the greater and lesser Hooft or head, about which are many shoaldes which you must avoyde. The lymie shoald or kalke grounde of 2. or 3. fathã depth stretcheth downe into the sea from the greater Hooft almost to Eackholme. Under Eackholme you haue harborough, and cleare grounde on euery side. Lyfeland shoare all alongst vp to Narue hath no rocks at all. North West and by West of Hogelande lieth a rocke vnder water, aboute 3. leagues of the shoare in 2. fatham.

In these partes of Rusland and svvedeland, in times past none might traffique but those of Lubek, wherby they became very Wealthie. For there are riche and costly marchandises, (viz.) All kinde of Skinnes, Furres, Hemp, Flax, Tallowe, Wheate, Rie, and such like.

Trale sondt
Lapaueſi
Kiuaneb
RVS
Wyburgh
Newkerck
Reede hel
Eaſtern fyſher
Someva
Weſtern fyſher
Scharrs
Vekelax
EAST
FIN LAND
Olſbi
Scherrs
THE
outtermoſt or the fartheſte parte of the Eaſterne Sea Eaſt wardly, the which lyeth Incloſed with in the coaſtes of Eaſt Finland, Rusland, & Lyffland, and wherin lye the Narue and Wyburgh the twoo furthermoſt places or marchante townes of the whole Eaſterne Naugation, with all the Circumſtances of the ſituation, the Iſles and Swediſh rockes called Scharres
Reiſanburg
Scharres

Narue
Dutche Narue
Oreſcack
Iuan grot
Ruſse point
SOVTH
EAST
WEST
Tutters
Hoogelandt
Cleyne huſt
Groote huſt
Kalck grondt
Tessburgh.
Eeck holme
LY F
LA ND
English leagues 1 2 3 4 5 6 7
Spanish leagues 1 2 3 20 in a degree 4 5
Dutche leagues 1 2 3 15 in a degree 4 5

A PERFECT DESCRIPTION
OF LIFLAND ABOVT REVEL AND *Moonsound* and of the coasts adioyning.

FRom the Isle of *Nargen* to the buy you haue a great league East and by South: and from the buy to Reuell two great leagues: not farre from the Isle of VVolfsound is a blind rocke: When the tower of Reuell appeareth ouer the point of the Island you are come neare the Rocke which lieth halfe a league NorthWest from VVolfsound. On the East side of vvolfsound are two Islandes called VVrangen, you may anker within them in the channell at 10. or 12. fatham. A league and a half to the North northWest of them, lieth a blinde rocke: and an other halfe a league off plain North. The shoare of Lyfland is all cleare ground.

If you will sayle from Oegens-holme into Moonsund, keepe South southWest, and SouthWest & by West, vntill you are within Osse-holme. Grasholme lieth a league beyond Osseholme which you may sayle round about or ride there at your pleasure. Grasgrond lieth a league within Grasholme in the midst of the channel: but borow of the land of Syburgnesse or Dagerorts, along by the little Islands a reasonable distance off. keepe within al the Islandes S and by E. and S. vntill you come to the Westerne coast of Oesell nigh the great tree, where you haue 4. fatham water, sometimes but three. Holde on alongst the coast of Oesell foure or fiue leagues Southeast and by East till you come to a little Island, then keepe on betweene that Island and Oesell, vntill you come to the farthest partes of Oessell Where is 8. fatham water. Halfe a league from thence lieth a shoalde called the Pater noster Which you must sayle aloufe off. Then may you plie agayne SouthWard to Runen, which is an Island situate ten leagues hence in the great bay of Righe.

Reuell, being the moste famous Marte of the Whole countrie, so flourished thirtie yeares past, that euery yeare there arriued and were vnladen aboue an hundreth great ships with salt, Which were also woont to be fraighted there againe with VVheate, Rie, VVaxe, Flaxe, Hempe, all kinde of Skinnes and Furres, and such like commodities of good value. But it is now so decayed by reason of the continuall warres With the Muscouytes, that through the Whole yeare there are scarce sixe ships laden: Which hath bene to the generall impouerishing of this citie and countrie.

Thus do appeare the Coastes here vnderwritten When you say
Thuft
The Eeck holmen
LIVONIÆ
LIFF
Wesenburch
t Elsburgh
Reuel
S. Brigitta
Eke holmen
Kock
Wolfs oort
Wrangen
Wolf sondt
The Wolff
A DILLIGENT
description of
THE SEA COASTES
of Lyffland with all the
Iles there vnto appartanig
enë as they do appeare
and open when you sayle
there alongst from Ekehol
men vnto Syburghs ness
Finlandtsche
Schaeren
EAST

Sijburchs neſs
OESEL
Loden
Tſlot
Moen sondt
Hapſal
Moen sondt
Gras gront
Gras holm
Oſs holm
Gras sondt
THE I-
LAND OF
DAGEROORT
Sijburchs neſs
Pades
Clene Roge
Surp Grote ruge
Oetgens holm
WEST
SEA
Engliſhe leagues 20 in adegree
Spaniſhe leagues 17 1/2 in adegre
Dutche leagues 15 in adegree

A PLAINE DESCRIPTION
OF *RIGHE* AND *PARNOVT*, AND OF the Islandes adioyninge.

YOu muſt ſayle from *Domeſneſt* to *Runen* 6. *leagues* East, and East and by North: and from Runen to the northeren coaſt of Oeſell, where Moonſound begunneth, you haue 10. leagues North, and North and by East: from Runen again vnto Kyne 8. leagues East north east. From Kyne to Pernout it is 7. leagues North east and by East, where in the entrie you haue but 6. or 8. foote depth, the channell ſometimes ſhifteth from place to place, and ſerueth only for ſmall veſſels, called Boyers. There ſtandeth a litle towne between Pernout and Righe called Salles where lieth a ſhoald in 8. foote depth before the entrie, and ſerueth likewiſe but for ſmall veſſels.

Duinemonde of Righe beareth from Runen 12. leagues South east. The eye markes to enter the riuer of Duina, are when the watch-houſe that ſtandeth a litle way from the caſtle of Duinemond is one with the great tree, and the ſouthſide of the citie of Righe with the poynt of Terſpille. Theſe are the right markes to ſayle into the Riuer a good wayes, turne then vp ſometimes SouthWard, till you come between both landes. Then borrow of the South coaſt to the poynt of Terſpille, where you may anker in any place in 6. or 7. fatham: you muſt go by your Lead becauſe the channell altereth almoſt euery yeare 4. leagues: to the SouthWard of Domeſneſt is a litle riuer where many ſmall veſſels doo lade.

In theſe two places thirtie or fortie yeres paſt was great traffique of all kinde of coſtly marchandizes which through the continuall warres with the Muſcouytes is almoſt vtterly decayed. NotWithſtandyng there is yet ſome traffique at Righe, for euery yeare thirtie or fortie ſhippes laden with Salt are there diſcharged: and aboue an hundred ſhips are likewiſe fraighted with Wheate, Rie, Clawbordes and waynſcot, Wax, Flax, Hempe, Pitch Tarre, Salt, and drie Hides, Sheepe-ſkinnes, Furres and other like commodities of good valew.

Thus appeareth the land of Duinamor
of the Riuer called Duina neer R.
LIFF
LIVONI
Embeck fle
Pernout
THE SEA
card of the Sea
coastes of Lyffland
comprehending the
land lying rounde
about the great
Inhā of the Ryghish
auē as they do ap:
peare & open when
you sayl ther alongst
Manno
Sorcholm
Kijn
THE GREAT
Leal
LAND
OF THE
NORTH
Pater nosters
OESEL

comme before the mouth
Duinemont
Comt
Namul
Rijghe
Vpzul
Salen
PARS
Lemsel
Duinemonde
March
Spille
De Boldera fluuus
Duina fl.
INHAM
SOVTH
RIGHISHE
WEST
Tucken
CVR
LAND
Ferwalen
Rumen
English leagues 20 in adegree
Spanish leagues 17 ½ in adegree
Dutche leagues 15 in adegree

A MOST PLAINE DESCRIPTION OF THE ISLE OF *OESEL*, WHICH lieth betweene the *Belt* and the bay of Righ and stretcheth vp *from the narrow entrie or straight towardes* Righe and Patnout.

YOur course from *Domesnest* to *Runen* is 6. leagues East and by North: and so farre lieth Abbrick from Runen, Whereaboutes are many dangerous shoaldes in your faire way 3. or 4. fatham deepe: But being past Domesnest, you may see it When you are a great league from Oesell. Aberburgh beareth WestWard of it, Where shippes are fraighted With Barley, Mault, Tarre, all kinde of grosse Wares, and diuers Skinnes and Furres. From Domesnest lieth a very dangerous riffe or a rough and stone bancke, a league out into the sea, Northeast, and Northeast, and by East. The roade of Oesell, lieth from Domesnest three leagues NorthWest, and NorthWest & by West: Where in 7. fatham is good ground to anker. There stretcheth downe also from the South end of Oesell a riffe or bancke two leagues in length into the sea SouthWard, and South and by WestWard. Which is both hard and roomie: WestWard from this riffe lye many scattering shoaldes and banckes Which stretch out NorthWard alongst the coast of Oesell, Where in many places you haue onely 2. 3. 4. 5. fatham &c. There are besides in Oesell two other hauens Where shippes are laden: viz. VVyck, and another 5. leagues from thence NorthWard.

Hontsfort, beareth from VVyck eight leagues North, and from thence haue you six leagues to Dagerort North NorthWest Wherein standeth an high Tower, Which you may see on both sides of the land. BetWeene both these heades you may sayle to Hontsvvick, Which is a perillous bay: for there are many shipWrackes by reason the pilots are not skilfull thereaboutes. Now that I may againe set downe the entrance of Moonsound. Saile from Runen North, and North and by East, to the North poynt of Oesell, and they lye ten leagues one from an other: but beare alouse from the shoald called the Pater noster, Which ioyneth to Oesells poynt: When you are cleare of it, you may see a little Island Which you must bring on the starbord: hold on in 8. fatham depth betWene Oesell and that little Island, then set NorthWest til ye get another Island on the starreborde side, Whereupon stand two or three high trees, but keepe alongest the coastes of Oesell vntil you see a great tree: Which being past you, shall perceiue many litle Islandes on your Larbord, Which you must set halfe a league on the same side from you. In this place you may best consider by your compasse how all the channels of this entrie doe stretch: Oesell, is a rough countrie and very hard to be knowne by such as are on the outside of the coastes.

This Charte also containeth part of Curland, Where standeth Dervvind the cheefest citie, yet knowne to few Sea men: and sometime (though very seldome) a smal vessel or two are fraighted there With clowbord and Wainscot.

Liuoniæ pars.
Pater noster
THE RYGSCH
Dwael gronden
THE YLAND OF OESEL
Aberborch
De Moen sondt
Wijck
Engliſhe leagues 20 in adegree
Spaniſhe leagues 17½ in adegree
Dutch leagues 15 in adegree
Daden
Hontsfuyck
Hontsoort
Degheroort.
THE RYGSCHE

Thus openeth and appeareth the land called Curland, from the backhouens vnto Domesnest When you are a legue of

Domesnest

Derswinde

Backhouen

SEA

Dondangen

Domesnest

THE SEA Coastes round abouts the Ile called Ossel With a part of Curland beginning from Dagheroort vnto der Windeeuē as the Countrei doth shewe his situation that Waye

The Streght of Ryghe

Blauwe berch

CVR

Anger

LAND

Lifferoort

Dwael gronden

Derswind.

Tblack

South

West

BOTTOM

A LARGE DESCRIPTION OF PRVSLAND WHEREOF DANTzick is the chiefest marte.

IF you will sayle from *Heell* to *Dantzyck*, conde South and South & by West towardes the castell of Termonde, where you must passe through the olde entrie from the East Warde: go in between two Buyes, vntill you are cleare of the Peerres, called kysten: Where alongst lieth a newe entry which nowe is very commodious for litle vessels called Boyers. From Heell to the entrie of Kingsborovv, shape your course full East, where you shall comonly haue two entries (viz.) the one lying South southeast vp alongst the high land of Hanheer, the other E, and E, South east: But you must not trust much to the incertentie, because euery yeare they change their course, sometimes South east, and at other times inwards South South east, When you are within, there is a great Lake, called the Haft, which parteth it selfe two wayes, thone towardes Meluing, the other towardes Kingsborovv. Your course to Meluing lyeth South southwest, and South and by West, but Kingsborovv beareth about six leagues East and by Northward.

Moreouer if you will set out from Righeade towards Memell your right course is twentie leagues Northeast and by East: the entrance of Memell is 2. fatham deepe: being within it: turne Westward, and being cleare of the poynt anker in 5. fatham water.

Southward vp lieth a notable great bay or Lake called the Haft, into which runneth Chronus the riuer of Memell out of Littuania, from whence commeth great store of flaxe: and likewise the Riuer of Dune neare vnto Kingsborovv: so that many streames doe meete in this Lake.

The Dukedome of Prusland conteineth fiue notable marte townes viz. Dantzike, Meluing, Brimburgh, Kingsbourgh and Memell, amongest them all Dantzike is held for the cheefest, where euery day is solde aboue a 1000. lastes of Wheate and rie, and likewise Rafters, Pitch, Tarre, Flaxe, Hempe, Pruse beere, comonly called Iupenbeer, and many other commodities of great prise. The trade in Meluinge and Brimsburghe is of such like merchandises in great abundance: at kingsbourgh is the cheefest staple for dealebord, and clofbord. It yeeldeth also great store of Wheate, Rie, Flax, Waxe, Hemp, Pitch, Tarre, Sope Ashes and like merchandises in such great quantitie, that it may worthely be counted amongest the most famous. And so also may Memell, whose traffique is most of Flaxe, besides all such merchandises as may be had in kingsborough. But I purpose not to perticularize euery thing that is transported thence.

Notwithstanding I must confesse that this is a most fertile and plentifull country, which God hath blessed aboue all her neighbours & other countries.

Curland as it sheweth & openeth before Sauenberghe
Conincx bergen
Tapea
Memel flu:
Dun flu:
SAMAGITHEN
Soka
Grynhoff
Rapurn
Vischers dorp
Kurlantsche haft
Sudan
Nyburch
Visshuesen
Rosetin
Der memel
Nerung vander Memel
Diep vander Memel
THE CARDE
of the sea coastes of the land
of Prussya with all the hauens and
riuers from Memel vnto Heel

Thus appeareth the land aboute Loockste which lyeth on the North side of the entrannce of Comingsberghen or Kinsborowe

PRVSIÆ PARS

Tſlot Tarbalij
Brimſberghe
Frouwenburch
Meluingh
Holant
Halberſtat
Thaff
Friſh haff
Brande boomen
Nerung
De Wiſel
Werder
Stedt hoft
Wiſſeldijck
Dantzick
Dantzicker diep
Nieuwe diep
Ter Munde
Bijſchopsberch
Groenſwort
Haſperch
Heel
Vernoorde
Aexters neſt
Robenuen
Poost
SOVTH
WEST
SEA

AN EXACT DESCRIPTION
OF THE COASTES OF *POMERLAND*
and the countries adioyning.

FIue Leagues from *Vernorde* lieth *Righe head*, and from thence to Serneuiſſe you haue 3. leagues: alongſt the ſhoare runneth a ſmall Riuer, which farther inwards ſpreadeth into a great Lake. And from Serneuiſſe to Liba it is fiue leagues where a creeke goeth in called the Oſſe. On the Eaſt ſide therof ſtande many litle rockes or ſtumpes, called V Volleſaken. From thence vnto Reefcoll, (which is a high Mountayne whereby the coaſte is knowne) you haue foure leagues and ſo farre lieth the Stolp or Gars-head from Reefcoll, where is the mouth of a litle Riuer, fit for veſſels of light burden. From Gars-head to Revvold it is three leagues: in that entrie called V Vipper you haue 4. fatham. Colesbourghe lieth from Revvolde ſeuen leagues, where alſo lieth a litle ſtreame or creeke called Radyng. Between Colesbourgh and Iaſmonde are reckned 12. leagues, and do lie playne Eaſt and weſt the one from the other. South eaſt and NorthWeſt from Colsbourgh beareth the Iſland Borneholme, where you haue rounde aboute good anker holde. Eertholmen is diſtant from Borneholme two great leagues North North eaſt.

Upon the coaſtes of Pomerland ſtandeth Stattyn the principal marte towne of that countrie, from whence is tranſported great ſtore of Wheate, Rie Barly, Maulte, and the Beere of Meſons. There lieth alſo the Iſland of Rughen, which at ſometimes yeeldeth great plentie of Rie, but commonly it is reſtrayned by the inhabitants.

Herl
Extern nest
Rustbrouwick
Rijffhooft
Harkesbeck
POMER
Poest
Rijffhoft
Serrenasse
Harkesbeck
Lijtse
Wolnesaak
De Ijse
Reefool
29
30
28
THE SEA CARDE
of the coastes of the Dutchie of Pomerland in there trewe situation
EASTERNE

... sayle from Borckum ... Reefcol two leagues from lund alongst the coast vnto the Eyghisse head

Reefcol

Stolp

Col bergen

N

Gouwenbeech

Rewolde

Caßelijn

The Easterne coast of Colberghen appeareth thus

De Raddin

Stolp

Garshooft

De Wipper

12

10

Dutche leagues in a degree 17½

Spanish leagues in a degree 20

English leagues in a degree 69½

MERIDIES

Auster ad Zephirum

Auster Austro Zephirus

Austro Zephirus ad Austrum

Austro Zephirus

Zephirus ad Austrum

OCCIDENS

Zephirus ad Septentrionem

Zephirus Septentrio

Septentrio Zephirus

15

22

47

Brouwers Riff

BORN HOLM

12

10

A PERFECT DESCRIPTION OF THE NEW DEEPE THAT STRETcheth vp to *Stattin* and *Mesound*, and of the Sea coastes of Mekelenburgh, Lubeck, the Belt, Greensound, Moone. &c.

IF you will sayle into the new deep, set from *Iasmonde* two leagues South Southeast towardes the Wood called Peert or Bock, from whence you must hold on a league Southerly. The entry turneth inward West SouthWest. Where you haue shallow water, both within and without: As you sayle, set Mesound on the starborde and Stattyn on the larborde side, where is commonly calme water.

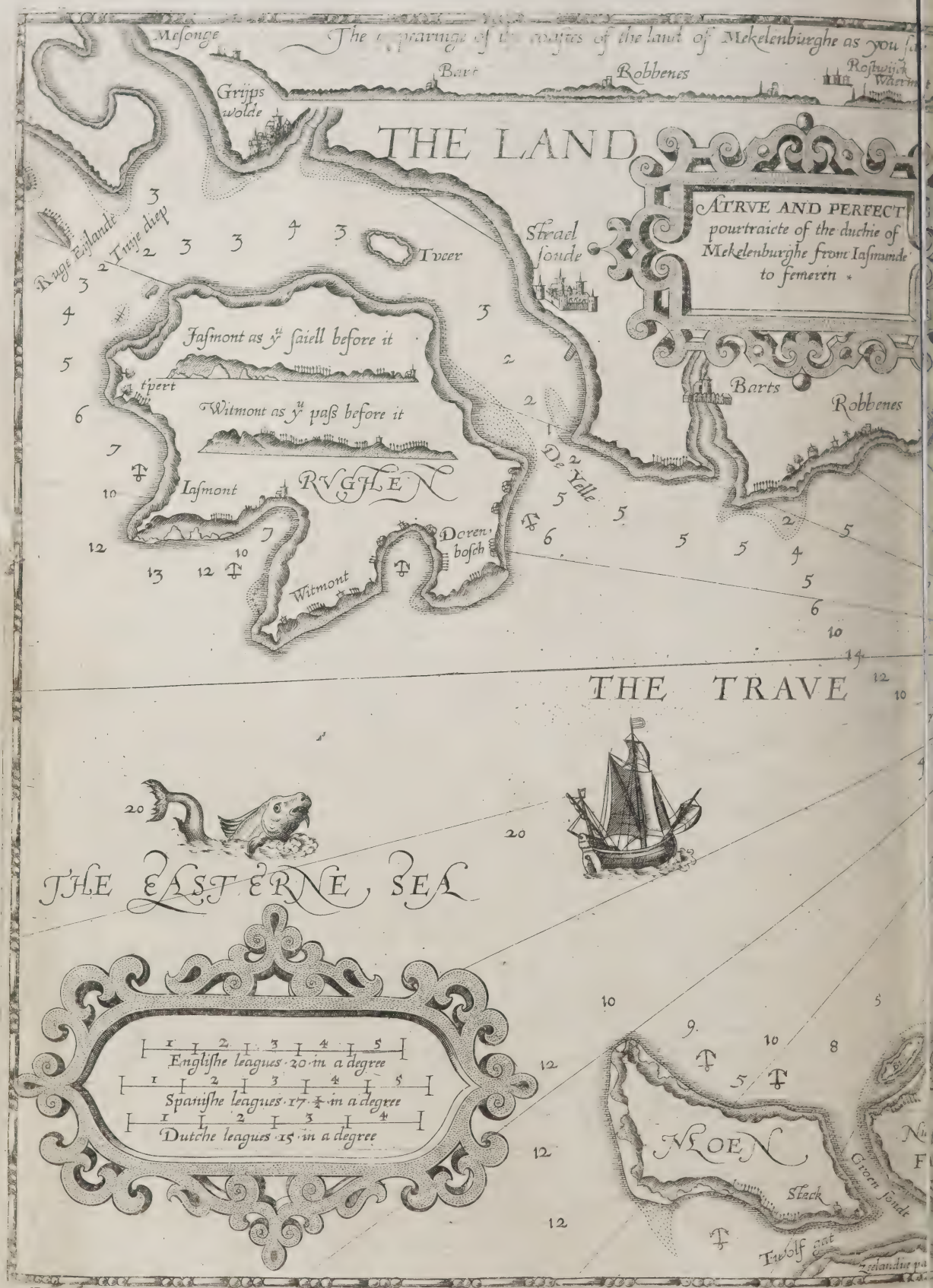
Grypsvvolde is situate vpon the very mouth of a little riuer before you as you goe in.

If you will passe through the Yell, which runneth neere Dorenbosch, keepe betweene the coastes of Barts and the Isle of Rughen, where you haue but 1. or 2. fatham water, and is onely for small vessels. This course may you also take to sayle into Mesound: at Barts you haue a little riuer or creek gounge in, which beareth onely Boyers and other small vessels.

SouthWest and by West from VVitmond lieth Rostvvyck 12. leagues, and is a port for small vessels, and from Rostvvick to VViSmere haue you 7. leagues SouthWest, it is a good hauen for all shippes. Lubeck lieth from vviSmer first to the West South West, and then South West and by south, where is a deepe channell for great ships to passe thorough, for the shoald or barre that lieth in the entrie is of 12. foote depth. There haue you a great Bay or a notable good hauen most safe for any Winde, except a Northeast and a North northeast. From thence beareth Femeren eight leagues, and your course lieth from thence South southWest and North northeast. The Belt runneth in betweene Longland and Laland: From the coastes of Laland stretcheth out a Riff into the sea a league distant from Langland: When you haue brought the Tower of Maschou NorthWest from you, then do you strike vpon the Riff: Wherefore shape your course neare Longland side in 5. fatham water, and so shall you goe cleare of the poynt called Laland Haecken. But when the sayd Tower beareth East Northeast from you, you are past the poynt, then conde NorthWard vnto Sproy, alongst Langeland. Under the Isle of Moon is good anker ground on both sides, albeit from the North coast there stretcheth out a Riff within which you may anker: and on the South side there is good harborough from a North northeast, and a NorthWinde viz. from the Northeast to the northWest side alongst hard by the poynt, the ground is fayre and cleare from rockes, as you may perceiue by the charte. Geester-riff, lieth six leagues South southWest from the point of Moon.

This countrie of Mekelenburgh vttereth sundry sortes of Beere viz. Mesan Rostroyck, and Lubeck Beere, besides much Rie, Wheate, Tallow, Wood, and skinnes: In the Island of Rughen, which belongeth to this Dukedome, is good store of Rie.

Femer also is one of the chiefest places both for Wheate, Barley, Mault, and such like things. Ouer against Femer lieth Laland from whence is carried at sometimes some small quantitie of Barley and Mault.


Mesonge
Barr
Robbenes
Roswijck
Grijps wolde
THE LAND
A TRVE AND PERFECT pourtraicte of the duchie of Mekelenburghe from Iasmunde to femeren *
Rugge Eijlandt
Twije diep
Straet sonde
Twer
Iasmont as yt saiell before it
t'pert
Witmont as yt pass before it
Barts
Robbenes
De Yelle
Iasmont
RVGHEN
Witmont
Doren boseh
THE TRAVE
THE EASTERNE SEA
Englishe leagues 20 in a degree
Spanishe leagues 17 1/4 in a degree
Dutche leagues 15 in a degree
NLOE
Steck
Groen sonde
Twolf gat

when you are a mile of the shove

Ouwe vaer

Poelandt

Ter Wismer

Groot Cruijs ort

Cleijne Cruijs ort

Lubecq

MEKELEN BVRGHE

Ter Wismer

Boeck hooch

Rostwijck

Ouwe vaer

Poel landt

Ter mude

Groete Cruijs ort

Cleijne Cruijs ort

Ter munde

Ter munde

De Traue

HOLSTER LAND

W

FEMEREN

FEMEREN

Derborch

Pieters horn

Heijlige hauen

Stabul

N

Troode sandt

Nustat

Robuij

APERFIT POVRTRAICT of the Sea coastes of Lealand and the countries adioyninge

De hacken

Maschou

Egghen fort

Flensborch

THE BELT

LA LAND

Maerborh

Golber sandt

LAN GHE LAND

RPJCB

A PERFECT DESCRIPTION OF
THE BELT, AND ALL THE ISLANDS, ROCKS, Bancks, Shoalds and *Riffs*, which are betweene *Lalands Riff and Stephens head.*

HOw *Lalandsand* may be shunned, hath been shewed in the former table: ouer against it Eggeford (in which you may sayle to Flensburgh) runneth into the Belt, which thwart ouer against Laland Riff is 6. or 7. fatham deepe. The North coast of Langland is fiue or six leagues Northward from hence: but the Sproy is not past three leagues to the Northwest from the Northbound of Langland, and you may sayle round about it: from the South coast of it, there trendeth a riff well neere a quarter of a league into the sea. The sound of Newburgh is distant from thence two leagues Southwest and by West: and it is roomy and large: You must geue a good birth off the Northerne bulwarke, because it is rockie. The entry hath 5. 6. and 7. fatham water. There is the kings custome payd. There is a little Iland to the Southwardes of Newburghs mouth, called Frisell, that way may you sayle to Flensburgh betweene the Iland and Swyneland: In the same course you shall meete with another litle Iland called Omen.

Groen sound, or the Northbound of Laland, is two great leagues of Sproy: And Groen sound floweth betweene Zealand and Laland: but hard by Geester riff it falleth agayne into the Traue of Femeren: there the Belt is 10. or 12. fatham deepe. The Riems lye two leagues North Northwest from the Sproy and almuch from Knoutshead. Now Riems is an Iland about the poynt of Finland, and can hardly be sayled about, for that there wants water at the West side: vnder it there is good road on both sides, in 6. or 7. fatham. The vttermost part of Swyneland lyeth North and by West, two leagues from Riems. From hence the Ile of Sampson lieth about two great leagues, on the South side whereof are many stragling shoalds of two or three fatham: Between the North poynt of Finland and the South poynt of Sampson you may saile into Meluersound, which runneth between Yutland and Fynland.

It hath many Portes wherein shippes are fraught, to wit, Flensbourgh, Hadderslo, Meluer, and many other litle townes as may bee seen in the perticuler Table.

From Riems North west foure leagues lieth a shoald called the Beltsack in the middest of the channell: from whence three leagues to the North north east, standeth a high Rocky Iland called VVero: This course or channell hath 10. or 12. fatham. There are three or foure other Rockes or Holmes to the Westward: between which in many places you may sayle in small Boates, but the course is most perillous, because it is full of rockes and shoalds betweene the Sampson and the VVero.

About North the east from VVero is Syro a litle Iland: between these two is a most dangerous sande called Hatters riff, yet keeping on your course a quarter of a league of them, you shall go cleare of it: you haue 4. or 5. fatham water on the side next to VVero, but on the East side of Syro, you haue deeper water fit for greate vessels.

Rednes is three great leagues South and by West from Syro: and of the North west side of Syro there is a a Riff or shoald to bee taken heede of: Both of them in many places shew aboue water. Stephen head lieth from these sandes fiues leagues North Northwest.

The great Helmes lie from VVero and Hatersriff two leagues, North Northwest hauing 4. or 5. fatham depth.

From hence into Arhuse sound, your course lieth neere hand West Northwest: Arhuse is seated in a Bay which hath 2. or 3. fathã depth. Southward from Arhuse sound runneth VVedersound, between Yuthland and Sampson but euery where ful of Shoaldes: So that he that will sayle it, hath neede of good experience of this course: For it aboundeth with shoaldes and sandes. But between the great Helmes and Yuthland there is 6. or 7. fatham deepth. Stephens head lieth from the great Helmes fiue leagues, first Southeast and then North northeast.

Half a great league Southward of Stephens head lieth a shoald of two or three foote water, called Caleground: Southward whereof there runneth in the Grymsound, in which you may sayle vp to Grimstead, which is a hauen fit to fraught Pinnaces and such like vessels.

From the South poynt of Stephenshead lieth Aelburgh sound, Seuen leagues off North and by West: In the very hauen or sounde there are two Bupes, and there is almost two fatham water.

On the West side of that Sound is a flat steeple called Hals, from whence to Haselyng (which is an Iland neare to Codanonia or Zeland) the course is fifteene leagues almost Southeast and by east.

From the North coast of Haseling about two great leagues North east and by North lie the shoaldes of Loosground or quicksande, which haue not past foure or fiue foote water. The Iland may be seen in the Mast of the shippe: if you set sayle from out of the Sound with a West winde take heed of these shoaldes.

But if you will set from Stephens head towardes Sebuy, you shall meet with a baucke of 6. or 7. fatham, called Sweetering thwart off Aelburgh sound: But when you are come so farre that the high hill behind Sebuy beginneth to appeare to you Northwest and by North, set your course North northwest: and when you haue shallow water, then haue you the right course.

The Riff or sand of Lesow hath 8. or 9. fatham water in the channell: but the shifting shoaldes haue but 2. or 2. and a halfe.

The Cape of Denmarke called the Schaghen or Scaw, lieth six leagues North and by East from thence.

The trafiques of these countries are manifold: viz. Suet, Fatt, and all kinde of Tallow, and other marchandises, as Filbeards, Barley, Mault, Wheate, Rie, and such like.

PART OF HOLSTER LAND
Wil
Kolin
Hardesloo
Flensburch
Meluer sondt
Sonderburch
Meluer
Boens
Aasens
Cartemundt
Foburch
FYNEN
Sandburch
Nyborch
Kruijshooft
Riems
Occidens
Meridies
Ommen
BELT
Friſle
Spro
LANGE LAND
Kallenborch
ZELA
Corſuer
Schelſoer
A CARDE
of the Beldt,
with all the Sea coaſtes, Bounds, and Si
countries called Laland, vnto Stuen
Hathe
Maſchou
LALANDIÆ PARS
PA
Groen Sondt
Neſt veldt
Engliſhe leagues 20 in a degree
Spaniſhe leagues 17 ½ in a degree
Dutche leagues 15 in a degree

Thus appeareth or ariseth Steuens heade, as you com towards it South west of ye half a league
Aarhusen
Mulber lieth almost as Coll, when it first appeareth and is West from you, and lieth hard by Sinden deepe of Alborch
YVT LAND
Grimste
Randerhusen
Orontbuij
Rang Sondt
Steuens hooft
Grim Sondt
Groete helm
Wero
Weder Sondt
Samsoe
Haters Riff
BELT
Sijroy
Landtloose gronden
THE BELT
Nijcopen
Riff
Haselijen

BPJCB

A PLAINE DESCRIPTION OF THE VTTERMOST COASTE OF *IVTLAND*, that stretcheth out with a point towardes the fartheſt partes of *the North ſea oppoſite to Norway*.

IF you will ſayle from *Schagen* called the *Scaw* towardes *Sebuy*, your right courſe lieth ſix leagues South and by Weſt: Southwardes of it are dangerous ſcattering ſhoaldes or ſandes, in 2. 3. or 4. fatham, but in the channell you haue 5. or 6. fatham water. The broade tower of Hals beareth from Sebuy fiue leagues South ſouthWeſt, and South and by Weſt, on the eaſt ſide whereof is the deepe of Aelburgh. In the entry are two Buyes, and the Tower called Hals ſtandeth on the Northſide thereof: Aelburgh lieth three leagues from the deepe vp the riuer. Two leagues Eaſtward of the deepe is a ſhoalde called Svveteryn of 6. or 7. fatham depth, which you muſt ſtrike ouer ſayling into the Belt: for in the Channell you haue 10. or 11. fatham water. The Ille of Leſon is all round about flat and ſhallow a good league into the ſea, conteyning but 3. fatham water: but on the Southſide the like depth reacheth into the Sea two leagues and it is beeſet with bankes of 2. or 3. fatham depth: But from the South coaſt, where ſtandeth a Church, ſtretcheth out a riffe toward the Eaſt two great leagues into the ſea: Within which you may anker in 6. or 7. fatham for a South ſoutheaſt Winde: There lieth out alſo from the Northſide a riffe a league into the ſea. Tryndell beareth from hence three little leagues to the ſeaward Northeaſt, & hath a ſhoald an anker and a halfe bigge and is not ſcarce foure foote deepe: neare to the Northeaſt part therof lieth alwaies a buy, leaſt the ſhips which come from Schagen ſhould ſtrike vpon it. The leſſer Helmen beareth from Schagen foure leagues South ſouthWeſt, you may ſayle rounde about it for there is no danger & it is 5. fatham deepe. Trindell lieth from Schagen ſix leagues South eaſt, ſomewhat eaſterly.

If you come by night about Schagen to ſayle into the Sound, bryng the Watch fier, or the fier beakon it ſelf SouthWeſt & by Weſt from you, before you ſet Southeaſtwards, for then ſtandeth the fier beakon in the middeſt of the eaſt towne, and you are farre inough beyonde the Riff or poynt of Schagen. Which are the ſureſt markes by night. But if you come out of the Sound by night, ſet the fier beakon ſouth ſouth Weſt from you before you turne about Schagen Riff vp towardes Hartshals: When the Watch fier beareth South ſouthWeſt from you, you may perceaue the Watch beakon fiue foote diſtant Eaſtwards of the eaſterne towne, which are moſt certayne markes to goe cleare of Schagen. But if you will by night paſſe by Schagen With an Eaſterly Winde, take heede of the ſtreame or currant of the Belt, for you may eaſely be carried vnder Norvvay Where there is a deep, Which you muſt carefully looke too.

Aelburg is the cheefeſt towne of traffique of this countrie, from whence is tranſported ſtoare of Barley and Mault, beſides ſome Hides, Tallow, and ſuch like thinges. The outtermoſt coaſt towards the northern ſea hath a hard and dangerous ſhoare, Whereof it ſtandeth you greatly vpon to beWare, for many ſhippes do there periſh, becauſe there be no Hauens nor Roades.

Sweterijn
Aelburger diep
THE
BELT
Tvlack
Triff
Lesou
Tvlack
Trindel
Dwaal gronden
Schagen
Zeebuij
Laeckſou
Cleijne helmen
IVT
ORIENS
MERIDIES
OCCIDENS
SEPTENTRIO
Triff
Schagen
NORTH

e land aboute the Holmes appeareth thus when you sayle ther alongst twoe leagues from land

Orim Holmen Boeuenbergen

Rijncope

Aelburg

English leagues 20 in a degree

Spanish leagues 17½ in a degre

Dutche leagues 15 in a degree

Swartsburch

r openeth the land of Schagen, Hertshals, & Robbenknijt, when you sayle there alongst a league from land

Hertshals

Boeuenbergen

LAND

eskription of the outtermost coastes of Jutland
of the Belt side & of the North sea side as they
situated between Aelburger Diep or hauen
and Rijncopen

Iutsche Riff

Holme

Orim

Moors

Robbeknijt

SOUTH

EAST

WEST

NORTH

A PERFECT DESCRIPTION OF
OF THE SEA COASTS OF *IVTLAND* CALLED *Yotland* and of the hauens, streames, riuers and Islandes therevnto belonging.

THere runneth in by *Bouenbergen* a litle creeke about 2. fatham deep at halfe floud: if you will goe in there, tary your tide, and then holde straight into the hauen as the charte sheweth you: and when you are within the poynt, cast anker where you haue 3. fatham at full sea: for within it is shallow and most commonly dry. If you will enter the creeke of Numit or Rincopen, and being come as farre as the shoald of Reef-horne, in 3. fatham depth turne vp Northeast and by North, vntill you perceaue Blevvberch on your starreboord: which lieth about two leagues Southerly from the sayd creeke: and on the sande side of the entrie are two white Downes: When you haue brought Blevvberch, East Southeast & bothe the white Downes are hidden almost Northeast from you, beare boldly with the Downes almost hard aboord the shoare, and then shall you see the land markes vpon the North coast, which when they shall be open before you tenne foote distance one from another, hale alongst the shoare in 2. fatham water (if you list) with your Lead: But when you are past the two Downes turne ouer towardes the two land markes and ride within by the North shoare in 3. or 4. fatham. The entrie neere the Iap stretcheth inwardes, North-east and by North, and North Northeast. Right ouer against the North side of the white Downe standeth a broad Tower, which you must keepe so, vntill the land markes be one: then by those markes runne alongest the Iap in: & it stretcheth most North North-east inwards vntill you are past the land marks: if you will go farther in, stay for a low water that you may perceiue how the drie Shoaldes and sandes lye on both sides for the channell is crooked and must be sounded. Rincopen lieth inwardes about three leagues, and there is eight leagues distance betwixt Numit and Surfuyt.

If you will saple towardes Surfuyt or Scelinckeroog comming from the North ouer the shoald called Reef-horne in 3. fatham or thereaboutes, you must conde alongst the South side of this shoald in 6. or 7. fatham water vntill you see the land on the Larboord, you shall perceiue a gray Downe called Doodbergh, holde alongst the land (which is a low sand stretching from the East to the Westward) in 3. fatham depth vntill you are come to the farthest end of the sand. Then turne vp Westward, and being within the sandes poynt, anker in 3. fatham water or more. There lyeth also a riuer or creeke ouerright the corner or poynt of this sand, where a Boyer may enter in. Here is the chiefe place of fishing of all Iutland: where a ship without eyther cable or anker may be saued in time of neede.

From thence beareth Graevv diep, three leagues South, Southeast: In the entrie you haue at halfe floud $2\frac{1}{2}$ fatham: Northward of the entrance is a poynt, neere which you may beare in 2. fatham: you may also goe in there by your plumet, and cast anker when you are past the poynt: For all the whole channell is crooked sounding ground, therefore alloone as you are within the poynt, cast anker. You may likewise take your course towardes Fanu, in 3. fatham, and so enter alongst the South coast. There lyeth inward a riuer or creeke vp into the land, whereupon standeth a litle Tower called VVoer, or VVoerd, and on the West side of this Riuer Boyers are laden: alloone as you are within Graew diep, there lieth a long sandy hill called Langleg: hale in alongest that sand and leaue it on your Larboord.

Knutse diep lieth from Graews diep, two great leagues, where two land markes stand vpon a drie shoald, which you must set almost East Southeast: and East and by South, and when they are one, you shall find the first Buy: from whence hold on to the second East Southeast, vntill you are past the land markes. Then haue you also on the Larboord side a little shoald, when you are past the same turne vp Northwarde toward the beacons and cast anker in 3. 4. or 5. fatham. There lie the ships that are bound outward from Rypen. On the South end of Fanu are two indifferent high white Downes, and are called the Southerne head. On the North side standeth a broad Tower whereby the coast is very easily knowne. About a great league Southward of Fanu, lieth a litle rounde Iland called Manu, from whence stretcheth a flatt, about a league and a halfe into the seaward. As much Southward from thence beareth the Ile of Ryme, which is two leagues long: from thence two leagues into the sea is shallow water. The Diep of Rypen, goeth in betweene Ryme and Manu, which is nought and all flatte, and now a dayes not vsed by such as trauell to Rypen. Silt is distant from Rym a league: betweene these Iflands goeth in the best Diep or channell of all Iutland, for when the water is lowest, it is 5. or 6. fatham deepe and stretcheth inwardes most East Southeast, and East and by South. On the Northpart of Sylt is an high redde cliff whereon standeth a church built minster like, and a mill. But within Silt you may perceiue a litle Iland whereon standeth a house: and when you haue brought that house about a cables length Northward of the Northcoast of Sylt, and the blacke inland beginneth to couer the red cliff and to take it from your sight, then are you come to the entrance, and then saple in East Southeast, vntill you are within the Ruft, which is left on the starbord side. And being past it you haue yet two other small shoaldes by the poynt of Sylt from whence runneth downe a vident and mightie streame towardes the North coast. In the channell it is 10. 11. and 12. fatham deepe. Then turne vp towardes the house almost Southeast, and you shall perceiue in Sylt a house which is the Admiralles, whether you must direct your course and cast anker, for there is safe riding in all weathers. But if you are bound vp to Lutk Tonderen, you must there take in a Pilott which must sounde the channell. Your course from hence to Tonderen lieth East southeast and East and by South: you may also go in by the shoald of the Ile of Ryme sounding as you passe in 3. or 4. fatham. There is also a little entrie hard by Sylt, which you may passe into vnder the same Iland. But when you are cleere of the Ruft, turne towardes Rym and saile then vpon the markes.

Your course lieth from the Vlie to Numit North Northeast more Easterly 40. leagues.

From the Vlie to Scelenckrooge, you haue xxiiii. leagues Northeast and by North from the Vlie to Knuyts-diep, your course is Northeast and moste Northerly 32. leagues, and this is your way to Ripen.

From the Vlie to Sylt your course lieth Northeast 30. leagues, out of this part of Iutland, commeth a great number of Beeues, Barley, Mault, Fatt, Suet, Tallow and such lyke,

Thus appeare vpon the Sea coaste that keeth on the South
side of Bouenbergen, vnto you comme on the South side thereof
Bouenbergen
Swartsburg
Hensburch
Rinsoyer
THE Situation of Jutland with the hauens
Riuers, Shoalds and bankes of the Iles therof,
from Bouenbergen vnto the Ile of Silt
A S.S.W. Moone maketh full
Numit
Blaewberch
Hensburch
Numit
Swartsburch
De Iap
OCEANI

appeareth the Ile of Rim when
lyeth right before you

Rim

T. . openeth the Ile of Silt when
you sayle ther alongst

Silt

Rijpen

Blew land

Holm

Blew land

Tonderen

Lutke Tonderen

A South Moone
makes full Sea

Guermans huys

Langheleg

Fanu

Suider
hoof

Wadt

Manu

flack

Wadt

Rim

flack

De Foech huys

Clif

Silt

Schellincker oogh

Groeuwe diep

Knuys diep

Rijper diep

Sild diep

De Ruyt

De Ruyck

NORTH

EAST

SOUTH

WEST

R M A N I C I

R S

English leagues 20 in a degree

Spanish leagues 17 ½ in a degree

Dutche leagues 15 in a degree

¶ An exacte and moſt dilligent deſcription of *Eyderſte, Ditmers*, and of the Sea coaſtes adioyning, with their true ſite and diſtances.

IF ſaile from holy land to Liſte or Silt Deepe, your courſe is North, and North and by Weſt, vntil you are paſt the ſhoald called Amerenborne, which lieth out in vii. or viii. fatham depth, almoſt weſt ſouth weſt of the Iſle of Ameren. From whence ſet North north Eaſt, vi. or vii. leagues towarde the North ſide of Syle or Lyſt: how this Channell is to be entred the former Charte doth ſufficiently inſtruct you. There is alſo a little deepe, neere the South ſhoare of Syle, fit for ſmall veſſels and ſiſher boates, which at halfe floode hath about two fatham water. On the South ſide of this entrie, lieth a ſhoald alongſt the Iſle of Ameren, and from thence ſtretcheth downe, almoſt ii. leagues and a halfe into the ſea, where you haue iiii. or v. fatham. By night you can come no nerer this ſhoald then in 7. fatham water, for about halfe a league from the Iſland it lieth aboue water. And you may anker vnder the ſame in x. or xi. fatham: then may you ſee Ameren almoſt halfe a league from you, Eaſt, and Eaſt and by North. But when it ſhall be north Eaſt from you, or north Eaſt and by Eaſt, you are on the South ſide of the ſhoald, and may boꝛrowe of the ſhoare in foure or fiue fatham. Then ſaile in betweene Ameren and the ſaide ſhoald North, and north and by Eaſt, towards the North Coaſt of the Iſland. But about Ameren you muſt goe with your lead vntil you haue brought it Southward of you, where you ſhall anker betweene the ſhoaldes of Sylt and Ameren, which are both dꝛie at low water. There is ſafe riding in foure or fiue fatham at halfe floode for any wind.

And if it happen that you are put to anker vnder the ſame with a ſhip that draweth much water, bring the north part of Ameren North and by Eaſt from you, and hold on to the North Coaſt of Ameren vntill you are cleare of the ſhoald: where you may anker in what place you liſt, becauſe it is there deepe enough. This entrie is called the Red deepe. If comming from the ſea you will ſaile in here, ſet the higheſt Downe of Ameren ſouth Eaſt. Saile in betweene the ſhoald and the bankes of the narrow deepe called Small Deepe, vntill you are come nere the Coaſt of Ameren. And boꝛrowe alongſt of the ſhoare in vi. or vii. fatham vntill you are paſt the north point of the Iſland, and ſet the Iſland South from you. But this entry is not for ſhips of burden. The Fiſhermen of Voren do vſe this place bothe for their going in and out on the South ſide of Syle. And if you will beare in with Small Deepe, bring the Tower of Pielwormen Eaſt and by North, and the higheſt downe of Ameren North. Saile in North north Eaſt by the out ſhoalds, but when you are within a little way, hold on north Eaſt and by north to Voren, keeping the Iſle of Voren on your larboord, and the north Maze on your ſtarreboord ſide. The Small Deepe hath at halfe floode two fatham and a halfe. But if you will ſaile from holy land to the Riuer of Heuer, ſet north eaſt a little more eaſterly: when you haue brought the Tower of Pielworme north Eaſt & by north, & a Cables length northwards of the ſouthern Kochuſe, or cowhouſe, you are at the outtermoſt buy. Thence hold on to the ſecond north Eaſt, and north-eaſt & by Eaſt and the tower of Pielwormen will ſtand north north-eaſt. but continue your courſe frō the ſecond buy to the two firſt Beacons north eaſt & by Eaſt: and from thence to the other two middle Eaſt north-eaſt: and then north-eaſt and by eaſt to th'other like markes, but all theſe markes ſtand on the ſtarboord as you goe into the Riuer of Heuer. There is a foure ſquare deepe ſtreete alled Quaghe it meeteth againe with the right Channell. There is alſo a ſafe Road betweēn Pelworme and Suderoge, but beare ſomwhat aloofe of the Weſt ſide of Suderoge, for there lieth out from thence a ſmall ſand: wherfore ſaile in alongſt the land of Pelworme, and you ſhall ſee a greene Iſland called Nubell, where you may anker on the weſt ſide in foure or fiue fatham, for there is ſafe riding for ſhips fraighted and ready to goe out. But if you will to Huyſe, you may ſet the Iſle of Nubell on your larboord ſide, and returne againe into Huyſe-deepe. There is alſo a Channell or entrie neere the land of Eydorſtreede, leaue the ſhoald called Quaghe on the larboord ſide, and enter north, north-eaſt, vntill you are paſt the Beakons which ſtande vpon Quaghe, and when you are come againe to the true Channell of Heuar, which lyeth inwards moſt north-eaſt and by eaſt, in the very entry of Heuar you haue iii. fatham water, but on the ſhoalde called Suidbalge onely two and a halfe.

But if you will goe from holy Iſland to Eyder: ſhape your courſe eaſt and by north, till you perceiue the Tower of Gartingen on the ſouth ſide of the Downes, and north-eaſt and by north from you. By theſe markes ſaile alongſt by the ſhoald called Blacwarr as long as you haue v. or vi fatham, where you may gage water. But when you haue brought Wiſſelen-beeren eaſt and by north at v. or vi. fatham, enter eaſt ſouth-eaſt, and eaſt and by ſouth, turning ſometimes eaſtward, vntill you are cleare of the newe ground: for then will the Beakon vpon the ſhoald of the Hont ſtand ſouth ſouth-eaſt from you. But when the Church of Taringhen appeareth a berge: and if you are to take in any Oren, hale alongſt thus ſhoare north north-eaſt, bearing ſometimes ſomewhat more eaſterlie to Vlekehorne: into the Channell called Doodebalge which you muſt warpe out of. But when you are right againſt the ſouth ſide of Cœberge, there you enter into the Channel called Herlanddeep which ſtretcheth down from the little Downes on the ſouth-weſt: and from thence reacheth Eyder ſtraight vp to Tonnenghen, firſt eaſt, and eaſt & by north alongſt Ditmers ſhoare, & then northeaſt to Tonnenghen. The depth of Eyder is almoſt in euery place like, and at halfe flood it hath v. vi. or vii. fatham. If you will from Eyder to the Pipe, ſet ſmall ſayle a while vntill the Church of Taringhen appeare right to the moſt eaſterly houſe of Ees. Then ſaile betweene the vttermoſt part of Hont and the ſhoald of Blaeworte, about a quarter of a mile: where at halfe flood you ſhall find two fathem and a halfe water: ſo holding on a little, you ſhall come to the Channell of Pipe, in v. or vi. fatham. There ſet almoſt eaſt ſouth-eaſt vntill you are paſt the Beakon, and from thence ſouth-eaſt and by eaſt, ſomewhat more ſoutherly towards the ſhoalds of Hunen, wheron ſtandeth a Beakon, and there haue you ſafe harborough for any wind: you may alſo turne in northward within the Riff of ſhoald, or three Beacons, ſet them on the ſtarboord ſide as you ſaile out, and you ſhall enter the Elue neere vnto the ſeauenth buy. And then ſhall you haue Neweworke almoſt ſouth-weſt from you.

If you will ſaile to the Elue from holy land, your courſe is ſouth-eaſt and by eaſt, and when the markes are one, you find the outermoſt or firſt buy, and the Neweworke will ſtand from you ſouth-eaſt and by ſouth, from the firſt buy to the ſecond, ſet eaſt, and eaſt and by ſouth. And from thence to the buy that lieth by the newe entry, eaſt north-eaſt, and north-eaſt and by eaſt. This buy lieth from the Neweworke ſouth, and ſouth and by eaſt. Hold on from the buy called Coolton, to the fourth buy north-eaſt, ſomewhat more eaſterly: from whence to the fift buy eaſt north-eaſt, and from the fift to the ſixt ſaile eaſt ſomewhat to the northwards. The ſixt buy and the New worke, lie ſouth-weſt and by ſouth, and the north eaſt and by north. Theſe buyes lie not as they were wont, but are newe placed in a rancke not far from the Newe Shoaldes: wherfore looke billigently to your tide, about theſe foure or fiue buyes, for the flood entreth ſouth-eaſterly through the new ſhoaldes, and the ebbe contrariwiſe fetteth through the northren ſhoaldes: but you may ſound the new ſhoaldes in v. or vi. fatham (viz.) from the fourth buy to the farthеſt part of the newe ſhoaldes from the vi. buy to the vii. your courſe lieth eaſt and by ſouth, and eaſt ſouth-eaſt: and from the vii. to the viii. ſouth-eaſt, and ſouth eaſt and by eaſt, and from thence to the ninth, where the ſhoald is called Kos, ſouth-eaſt, and ſouth-eaſt and by ſouth: then from this buy to the ſhoald called Meem: ſouth-eaſt and by eaſt, & from Meem to Cruporte, or the firſt buy which lieth in the open ſtreame, eaſt ſouth-eaſt: and then ſet towards the ſhoald called Pilgrimſand, or the buy in Doeſt eaſt and by ſouth, which you may ſaile vnto in foure or v. fatham water: from thence to Brunsbuttell hold eaſtward, next to the ſhoald of Saltthorne or Friburghe eaſtward alongſt the north ſhoare, there keep eaſt ſoutheaſt alongſt the north ſhore, to the buy which lieth ouer againſt Steur, and then forwards to the buy that lieth vpon Rugerortesande ſouth-eaſt and ſouth-eaſt and by eaſt. This buy is right againſt Eilenburghe in the midſt of the Channell, and there haue you alſo an other buy. Now keepe on ſouth ſouth-eaſt from Rugerortе to the buy vppon Staderſand, leauing the buy on the ſtarboord and the Fiſhers ſtakes on the larboord ſide, from thence to the buy in the Channell called Willerneball you muſt plie towardes the buy vppon the ſhoald called Blanckenewſand, eaſt, and eaſt and bynorth: keepe this buy aunſwering to the great tree vpon Blanckenewſand, haling northward alongſt the ſhoare to the fiſhing place, and from thence edge ſouth-eaſt to the buy that lieth vpon Bucht, ſo to Eechout eaſt by north, and there you haue 3. or 4. fa water as your courſe lieth. The Elue hath xiiii. or xv. fa. without the Channell, and a little from Scorton buy lieth Honts balch ſtretching inwards for the moſt part ſouth ſouth-eaſt and ſouth and by eaſt to the Beacons which ſtand on the weſt ſide, but without it is wide & large and ſeruеth for ſmal Veſſels to paſſe by the ſhoald called Wadt into the Weſer. Betweene the Weſer & Honts balch are two other Roades called Balgen. If you be diſtreſt about the ſoutherne ſhoaldes called Sudergronden, ſaile to them in fiue or ſixe fa. Water, & after hale alongſt by them but when you ſhall haue found a greater depth (viz.) viii. or ix. fa. and ſ you gage water, you are come to the other ſhoalde. They lie both inwards eaſt ſouth-eaſt: and all the ſhoares may be ſounded vntill you haue a ſafe Roade within the ſhoaldes. The ſoutherne or weſterne ſhoald called Breebalge lieth a kenning from the Newe worke. If you will ſaile into the Weeſer ſhape your courſe towardes the Iſlande called Wrangeroughe in viii. fatham water: then edge north-eaſt, till you haue x. or xi. fatham depth. Where lieth the vttermoſt buy north north-weſt of Menſer Church, and at the outermoſt part or end of Red ſand. From thence hold on to the fift buy eaſtward which lieth at the head of the Red ſand, and north and by eaſt of Menſer Church, on the north ſide therof beginneth the middle ſhoald called the Midleplate: betweene which, and the white grounds you may paſſe with your plummet in foure fatham water to goe to the Elue, for the ſhoaldes called white ground are but three or foure fatham deepe. The flood ſets into this Channell or courſe by the Red ſand ſouthreaſt, and the ebb contrariwiſe from the buy at the head of the ſhoald, to the buy that lieth in the maine Channell or way ſouth-eaſt and ſouth-eaſt and by ſouth. And in the ſame way lieth alſo an other buy, and the courſe from the true deepth to the buy called Nollerton is ſouth-eaſt ſomewhat more eaſterly: and this buy lieth at the ende of the high way called the Hoogs wegh. And from thence to the buy in Bolſſerſile ſouth-eaſt a little more ſoutherly, from thence to the wicker marke called the Bolbaecken, ſouth ſouth-eaſt, which being paſt you ſhal finde an other Beakon, where you haue good harborough for a weſt winde. From the marke called Bolbaecken to the buy in the open Channell ſet ſouth-eaſt more eaſterly, or from the other ſayd marke eaſt ſouth-eaſt, and ſouth-eaſt and by eaſt. That buy lieth north north-eaſt of Longworde Church. And the Boelbaecken beareth northward of the ſame Church: your courſe from the firſt buy of this ſhoald to the next, lieth eaſt ſouth-eaſt, & ſouth-eaſt and by eaſt, and it is at the end or gate of Cappelmans ſand, you may paſſe on the weſt ſide of it in two fa, & a half at halfe flood. Betweene theſe buyes are two or three Beakons which you muſt leaue on the larboord, you may ſaile from the innermoſt buy of the ſhoald by Cappelmans ſand, toward Waddens ſouth-eaſt and ſouth ſouth-eaſt, then alongſt the weſt ſhoare to Blixen, where is the Roade for ſhips that goe out. But if you goe to the Weſter Weſer called Iaa, hold on towardes the Iſland Wrangeroghe at three or foure fatham water, and ſaile in eaſtward till you are paſt the ſaid Iſland, where you haue the firſt buy at the point of Steenbalge ſhoald, which you may ſaile in by thence lieth a buy called Iaa tunne: from hence you may almoſt perceiue an other buy in Weeſer Channell, north and north and by eaſt. From the buy vppon the ſhoalde called Menſſer-olde-ort, to Scollich-ort or Huick-ſyll, keepe ſouth and ſouth and by weſt: but from Huick-ſyll, alongſt the weſt ſhoare, ſouth and ſouth and by eaſt: and from Huick-ſyll to Sypkes ſand eaſt ſouth-eaſt and ſouth-eaſt and by ſouth, you may ſaile by the ſhoald of Sypkeſſand but holde alongſt the eaſt ſhoare till you come to the paſſage, then turne weſtward and let fall anker: it is there large and wide, and full of little Iſlands inwards. The worſt depth of the Iaa is of three fatham. But if you will into Harle deepe, ſet towards the Iſland Spickerooges in three or foure fatham where you ſhall enter eaſtward, and there you haue the outmoſt buy, from whence you may goe to the next, eaſt, and eaſt and by ſouth: where at halfe floode is two fatham depth: and a little after you are paſt this other buy, there lieth a ſhoalde which you may paſſe by on both ſides, and your courſe then lieth ſouth ſouth-weſt, and otherwhile more ſoutherly to Fouk ſyle. There lieth out from the weſt point of 9 Iſlande Spikerooghe a Riffe, ſaile in on the ſouth ſide of that Riffe, at the entry called Oſſebalche alongſt the Iſland called Langerooche in three or foure fatham, but in the very entry within the ryffe you haue onely two fatham water, but when you are come to the farthеſt part of the Iſle Langerooche beate towards the riffe, for betweene that and the ſhoald is 7. or 8. fatham water. When you are cleere off the ſhould, hold on ſouth-eaſt, then towards the Weſter Wade more eaſt, and ſouth ſouth-eaſt. The enter courſe and trafique of theſe Coaſtes and Hauens is of many ſundry kindes of merchandiſes, as Sope Aſhes, Wheate, Rie and Barlie. They yeilde alſo ſalt and dyes Hydes, ſawed Boards, Timber, Pitch, Tarre, Hamborough Beare, Tallow &c. And many other commodities. But the cheefeſt and principall Marts of theſe Countries is Hamborough.

A DESCRIPTION OF THE
Sea coastes of Eyder Ditmerst & a part of Jeuer:
land with the Riuers of Wesee, Elue, Eyder, Heuer,
and other entrees sandes and shoaldes, lienge alongest thes
sea coaste of Germany.
Thus appeareth the Ile of Silt when you heare in right before it
Thus openeth the Isle of Ameren wh
lieth right before you
EYDER
DIT
STE
STRANDT FRI ESEN
Ditsbijl
Boplum
Hadstedt
Huysum
Luike Tonderen
Luem
Huyer
Roet kliff
Tuperhoost
Habel
Oelandt
Trimmoers
Ostermolt
Stinthijl
STRANDT
Pubel heuer
Pilworm
Lappone
Grote de
Fux
VOOREN
Wiehard
AMEREN
SILT
LIST
Furmans hays
Iure sand
Tonnenghen
Coetenghe
Vlcke horn
Westerheuer
Gartingen
Tattinghen
S. Peter
Ees
Londen
Eyder stroms
Vlie
Sant
Dis gat
Snyder buth
Noorder buth
Wester buets
Noorth buth
Noorder oath
Snyder oath
t Smale dip
Troute dip
Ameren horn
Land dip
Roet Kliff
Ruff
Di Rueck
Tidy sant kliff
OCEANI
SEPTENTRIO
GERMANICI

his manner appeareth the land of Ditmers
you goe up the River of Elue
After this sort openeth & sheweth the land & coast of Hael when you saiel op the Elue
Oostermoer
Brunsbuttel
Noorthuysen
Muldorp
Baerlt
Romerne
Tflacke
Olde woorden
Roemerder sant
Buyssen
vlacke Strom
Huuden
Noordt gronden
Vogel sant
De Elue stu.
Nieuwe gronden
Koeltm. Tnieuwe werck
Scorton
De hont balch
op wault
De Wester tflacke
Bolsser syl
De hooge wech
De Iae
Steen balch
Schollich oort
Huyrck Syl
Menssen
Sonwerden
Knippens
Sipke sant
IEVERENSIS PARS
Ieuere
Garme syl
Funke syl
Warde mer syl
Fokenes busen
opt wadt
Lingher oach
Spycker oach
Wremyer oach
Mistplaet
De Wester
Ost balch
Scholiers huech
Holly land
Engliſhe Leagues 20 in a degree
Spaniſhe leagues 17 ½ in a degree
Dutch leagues 15 in a degree
Feybuzch
Halshorn
Vlieram sant
Vlieter
Grueter par
De mezen
Ternoert
Olde brouck
Groey
Ritze buttel
Roſt bank
Roſt tonne
HAEL
Lehe
Widwardt
Miſſelwaerde
Doeſtorp
Wester stuuus
Elsxem
Cappelmans sant
Waddens
Butiagers land
Burhauen
Lanckswerden
Equarde
Noort Swyn
Noort balch
Swyn balch
Witte gronden
Ruyter
Ruyter balch
Mistplaet
De Wester
Ost balch
Spycker oach
Wremyer oach
Lingher oach
opt wadt
Sipke sant
Knippens
Sonwerden
Schollich oort
Huyrck Syl
Menssen
IEVERENSIS PARS
Ieuere
Garme syl
Funke syl
Warde mer syl
Fokenes busen
opt wadt
Lingher oach
Spycker oach
Wremyer oach
Mistplaet
De Wester
Ost balch
Scholiers huech
Holly land
Engliſhe Leagues 20 in a degree
Spaniſhe leagues 17 ½ in a degree
Dutch leagues 15 in a degree

PRICE

A MOST EXACT DESCRIPTION
OF THE SEA COASTS OF *FRISELAND*, WITH
the riuers of *Weser* and *Emes*, and of *Scholbalch*.

IF you will sayle into the *Weser*, shape your course towardes the Isle of VVrangerough in 9. fatham: but take heede of the Wester VVeser, which goeth in neere the Island of VVrangerough. From hence holde on Northeast vntill you come to the first Buy, and then will Menser beare South South-east from you. Menser church that standeth in Vrovv land, is square and hath no steeple: your right course from the first Buy to the fift lieth for the moste part East and East and by North. And when you are come to the fift Buy Menser will stand to your sight South SouthWest. Then goe South southeast to the Buy that lieth vpon the Maller: and from thence to the Buy in the channell Southeast: and so forward to the Buy that lyeth in Bolserfyle, Southeast and by south: and being past it, conde towardes the South coast, where you haue two beacons, and safe harborough for a West Wind. And you may turne ouer into the ruer of Iad, by the poynt of the red sand: for there lyeth a Buy betweene the faire way and the red sand.

If you will sayle into East Eames, it stretcheth in alongest by Borckomsriff, East Southeast: Wherefore if you come from the East, bring the Tower of Borckom South and by East from you, and goe in towardes Borckoms shoare in 4. or 5. fatham: then hale so alongest the shoare till the tower be South southWest from you. Then turne vp towards Iayst, for you are cleere of the Riff, so that you cannot strike vpon the same. And when you are past the East end of borckom called Hooghen horne, you finde high sandes on both sides: and on the West side stand beacons where you may sayle in from beacon to beacon: for so long as Norden Tower and the Island come not together, you incurre no danger in the East Eams: but when that Tower is one with the Isle of bant, you meete with a bancke or shoald called Kings-platt: Wherefore keepe alongst the West shoare from beacon to beacon to Pelsommer shoald and you shall go safe.

But if you will beare in with the Wester Emes, bring the Island called the Bosch south and by East, and the West ende of Rottom Southeast from you & the shoare marks in one, & sayle in so to the first Buy where it is 6. fatham deepe: from thence to the second Buy East, and East and by North which lieth at low water in 4. fatham: and so forward to the third Buy Eastward where you haue at low water 5. fatham: and from thence holde on to the other two Buyes East and by South, where it is 6. fatham deepe, and sometime more, as 7. or 8. fatham: vntill you come vnto Hubers shoald: and keepe then most alongst by the Riff to Borckom East southeast: from borckom vnto the Ranzeel South East and by East: and from Ranzeel to the Buy that lieth vpō the shoald called Ruyd, East Southeast. On the West side of it stand 3. beacons: from that Buy towardes Eamshorne set East Southeast Where are two beacons betwixt: but when you are past Emes-horne, hold on sometimes Southeast, South southeast, South, and at last South south West, towards Groninger land thorow the straights. Where also vpon the West shoare you haue three beacons: & from thence hale alongst neere the coasts of Groninger, southeast, and East southeast, that you may goe cleere of the shoald called Paep: which lieth opposit to Delfsyll, and appeareth aboue water at a low ebbe. And when you haue gotten Fermsum, crosse ouer towardes Knock least you strike on the shoald called Ridderfant. And then must you keep alongst the coast of Eamden two cables length off to Loegen. By Knock is the road for ships that go out. But if you will saile into Scholbalch, you find two Buyes in the very entrie which stretcheth inwardes by the shoald called Peerdemart. Bring the shoare markes of the Island Schirmonick-ooghe in one, and sayle alongst the sayd shoald from the first Buy to the second, vntill you are hard aboord Schirmenick-oogh. Then enter in South southWest and turne vp southward, and at the last south southeast to the banck. And so run thorow the channell toward Groningh southeast, and towardes Dockum south.

There lieth also an entrie on the Eastside, which stretcheth in southWest alongest the Island schirmonicke-ooghe, vntill you are past the beacons of scholbalch. And by the schelling runneth in boren diep, Where you haue 3. or 4. fatham Water: sayle in leauing Boren Riff on your Larboord, for the most part East, and East southeast to the coast of Ameland.

The traffique of these countries is not very great: some come is transported from the VVeser and good store of bremer beere, crooked Wood, and like things out of Oudenburgh, Where Breme is the cheefest tower. The greatest entercourse by sea is at Emden: but such aboundance of Butter, Cheese Bacon, Barley, Beanes, Pease and such like merchandise is transported from Gronighe, and Frisland, as sufficeth for the substance almost of all the low countries and Germaine, to the great benefit and commoditie of the inhabitantes.

A DESCRIPTION OF the Sea-coasts of East Frysland with all their lankes Sandes and bekons

Appearing of thes vnder written Flands when they are a league of, thwart you
Borckom
Rottum
Thosch
Schiermonickoge
GROENINGER
LAND
Groeningen
Bontergaerden
Wedde
Winschoten
Heilger lee
Beert
Finster wolde
Mitwolde
Wier bert
Dollaert
Oster
Wagendorp
Grise monicke
Reyde
Groote munte
Oterdum
Fermsum
Dellf sijll
Holwirda
Loegen
Lavelt
Knock
Peußum
Groethuesen
Pelsum
Waldt
Eems horn
Watum
Oofter Nije landt
Wthuijsen
Nijelandt
Berum
Werum
Oldekerck
Selwaerdt
Harsens
Bellinga
Marhuijsen
Marslacht
Niekerck
Garnewerdt
Saxum
Olde hoven
Sijpverdijck
Elsdorp
Nijekerck
Ulrum
Groeninger diep
Berum
Nijewer sijl
Keten
Collum Sijll
Westgeest
Engelum
Waerdt
Aengum
Pasum
De Rundt
Opt
De Ranszeel
Borckom
Rottum
Schiermonickooch
Waldt
Hesse sant
Ameland
Keten
Luijst
Borckummer Riff
Oosterems
Luijster Riff
Marrick Sant
De Schut
Bosch sant
De Lauwers
Schoolballuch
Peerde mart
Toude Gatt
Westerems
SOUTH WEST
South west and by South
South west and by West
West South West
West and by South
WEST
West and by North
West North West
SEA
Englishe leagues 20 in a degree
Spanishe leagues 17 ½ in a degree
Dutche leagues 15 in a degree

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